



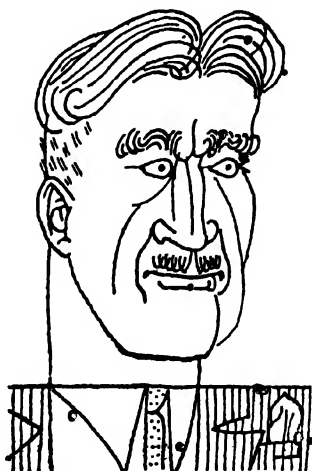
Aldous Huxley.



H.G. Wells.



Robert Lyndes.



George Orwell.

TOMORROW REVEALED

by
John Atkins



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The New Herodotus

MY FATHER WAS an eccentric and taught me how to read and write. He was famed throughout our land as an idle man and gloried in the title. He held no position of importance until his forty-third year, when he was appointed Chief Star-Gazer. This was a sinecure, entailed no work and was reasonably well paid. My father's claim to respect lay in his power to frighten others. This he did by striking imposing attitudes and reading long passages from books which no one could understand. Quite early in my life he taught me letters. I alone of all the boys in our tribe was given instruction. This cut me off from those who would have been my friends, and led to a kind of secret, almost hermetic life. At times I imagined I was chosen by the Powers for some special task, at others I feared that I was damned by the curse of letters. Other boys sometimes looked at me with awe, but more often they mocked. They said I was besieged by 'read wriggles', which was their term for writing. Occasionally I revolted against my father's ways, but the revolt always remained internal. One day I summoned up my courage and asked him the use of letters. He replied, 'There is none', and left me to imagine that he had made a point of great significance. I puzzled over this for days, but I feared my father and concluded he must be right, because life without fear is inconceivable.

Slowly I grew into his way of thinking and by the time I was sixteen I was convinced that the craft of letters singled a man out for an especial work which would be declared to me in the time of the Powers. Writings were not hard to come by. Everywhere we went we discovered old caches containing

books which were sometimes two thousand years old. These had been especially preserved by men such as my father and particularly by the warmth and dryness of our climate. My father, who rarely spoke of such matters, said the Powers did not wish the knowledge they contained to be lost but conserved them through the agency of men such as himself until the people should be purged of the wickedness which caused first the Explosion and later the Whirlwind. I had a very muddled idea of what had gone before. When I opened a book it would carry me without preparation into the time of the Antonines or the Sinoese or the Sophocrats. I thought of these as enormous monuments that had been erected in the past and sometimes wondered if a new monument might not be erected during my lifetime. There were no signs of this. Instead I saw dirty men tending their flocks and occasionally heard the drums calling the old men to a council, but no signs of greatness. I did not learn of human greatness until my great find.

My father was the most cynical man I have ever known. He never used the word, 'man', he called everyone an 'agent'. I was vague about who or what they were agents for and my father did not help me. He used to refer to everyone and everything in a pitying way, and always ended his half-hearted explanations by shrugging his shoulders and saying we were 'waiting'. Now I know that he cared nothing for either knowledge or truth. He kept his books about him as shields against other men, whom he despised and regarded as enemies. He said that he knew nothing of what he read but it served to set him apart from his fellows. In this way he was finally appointed to the post of Chief Star-Gazer. This was the result of his enumeration of the stars, which he did not by counting but by reading an author of, I believe, the Twenty-Fifth Century. He bewildered the tribe on other occasions by similar elementary legerdemain. Once, for instance, he forecast that a lake of salt water existed thirty days' voyage to the north-east. Everyone laughed at this and no one in our tribe would ever take the trouble to enquire. It was useless knowledge, like anything else of my father's. But one day three men appeared in our camp, wearing short trousers and blue glasses, and told us they had

come from the salt water. (They used the word 'sea', but it had been forgotten.) The men of the tribe then said that such knowledge was still useless, but my father must have been 'informed' as a sign. They continued to hate him but they also began to respect him.

You can therefore imagine the state of ignorance and cynicism in which I grew up—at the age of twenty fully prepared to succeed my father as Chief Star-Gazer and rapidly sinking into that immoderate intolerance that distinguishes one type of mediocrity from another. I was only saved from this psychological disease by an accident that at the time appeared to be the work of the Powers but which I now know to have been merely an accident and nothing more.

But first I must give you some idea of my circumstances. I am quite aware that this is not sound or accepted historical practice, but you must realise that the art of writing history lapsed many centuries ago. I am more of a pioneer than an end-product. That is why I like to refer to myself as a new Herodotus—I know I am unworthy but I am, in a sense, an initiator, only I have the unusual advantage of having a model. Herodotus wrote out of the dark; I might say I write out of Clarendon and Macaulay and Toynbee but in fact this is impossible. Such an approach needs a long apprenticeship and a sound tradition. I have neither. I am an amateur and the only model I could approach (not in excellence, but in method) is Herodotus. I must tell stories. Already I am becoming confused. This is perhaps the first book that has been written for fifty years. What used to be called scholarship probably died five hundred years ago. I will try to explain these things as I get into my history. I have experimented with the methods of Marx and Buckle, Fisher and Toynbee, I have struggled with their terms—you will find marks of them as you read. Perhaps this work will be a hybrid. Perhaps there will be next to nothing of Herodotus in it. But Herodotus gave me the idea and I owe him a debt.

When I was twenty-three I left home. I was beginning to realise that if my father ever died it would be when I was an old man. My hopes of succeeding to the post of Chief

Star-Gazer seemed to lessen every day. My father dominated me completely. I felt that I was merely an inferior version of him, I hated the cynicism that I took from him like a baby takes its milk. Yet I could not resist it, I accepted it in spite of myself. When he was present I was always silent, reading and copying uselessly, becoming more and more convinced that I would never attain the position for which I felt certain my training was adequate. I will not describe the mental struggles I endured, daily becoming more hopeless, more of a tool in my father's cruel hands. It was Katharine who saved me. Katharine should have no place in this work, yet my love and sentimentality compel me to mention her. She was a wild girl from the North, who had come up the river with some traders. For some reason she has never disclosed she did not wish to return, and I took her into our house. It is with shame that I have to record that first I had to ask my father's permission. At the time it seemed natural. It was customary. But since then I have learned many things which had been forgotten. She took an instant dislike to my father, she saw my frustration, and she told me that she had come many miles and was prepared to go many more. It was like a revelation. We had become so accustomed to living in the one place, from generation to generation, that it had never occurred to me to leave. We despised those who travelled from place to place—the traders and the men in short trousers and blue spectacles. The tribal name for them was 'jitters', the significance of which I did not realise at the time. No other family would have taken care of Katharine. We did it because we were expected to behave oddly, or perhaps because we *were* odd. I shall never know.

We took a boat and travelled up the Nile for many days. The farther I travelled the more frightened I was of my own insufficiency. I sometimes regretted the step I had taken. I told myself that it was only by a special fiat of the Powers that my father had won his exceptional position. There was no reason for me to believe that anywhere else in Africa would I be accepted for my aptness in useless studies. I could not gut fish, trap animals, I had no land, I knew no craft. Only Katharine steadied my failing nerve. She was a glad kindness to me in the

first place. In the second place she was the only determination I possessed. In myself I was empty. I feared the sunrise and the sunset, and I looked fearfully at every new face. I could not understand how a fraud could maintain itself.

We reached a settlement called Umm Dubban, which some said had been named after an Italian trader in the deep past. It was typical of our society that the words 'Italian trader' had a kind of thaumaturgic significance. They seemed to give a sanction to life, because everyone wished to feel that there had been a beginning, though it did not matter if it were a mysterious and completely misunderstood beginning. I had come across the word 'Italian' in my reading* but Italy itself was a mythological land of heroes, something like Atlantis or Lemuria, part-products of human yearning for excellence or paternity. You see how sophisticated I have become. I am now the only man in the world who is 'educated'. At least, I believe so. Perhaps in Tifule or Clapham or Travancore (places I have read about and discovered on maps) there are others. It is even possible that Señor Roberto Graves is still alive! But in my own world I know no other. There will be more soon, especially created to read this book, products of the schools I have been organising during the last five years. An accident, or a series of accidents, equipped me. My father, who in his heart desired the end of all life, even the annihilation of the Powers. (He did not realise this. I have learnt it. I have also learnt that men in the deep past felt the same and called it Götterdämmerung—a word from another language, a language as remote as an Italian trader—the damping up or blocking of the powers.) Katharine, who educated me in courage, which I lack so conspicuously. And, rather unexpectedly, a bomb.

• It will give you some idea of the kind of people we were when I tell you that Umm Dubban was a breeding place for flies. They held meetings and conventions on every square inch of available flesh. When you tried to sleep they congregated in a black colony on your eyelids and round your lips. They buzzed and screamed endlessly round your head. When you put food to your mouth it carried a cargo of flies which departed protesting

* Usually associated with the word 'vermouth', a kind of bug.

angrily just as your jaws were about to close on them. There was apparently nothing that could be done. They were the masters and they were uncontrollable. We were astonished that anyone could bear to live in such a place. Everyone complained about them, bitterly and vociferously, but everyone was convinced that it was someone else's duty to find a remedy. People talked knowingly of a powder which would destroy this menace, but no one knew from where this powder could be obtained. You see what I mean—everyone who lived in 'Umm Dubban lived in agony but he preferred his agony to the effort of thinking or planning. As for leaving the place, as Katharine and I did after a week, it was considered to be flying in the face of the Powers. Only 'jitters' could possess such criminal instincts. To move from the place in which one found oneself was criticism of the Powers. Even I could only do it with trepidation. Katharine came from the North where (I have since learnt) one acquires a natural taste for travel because of the climatic rigours. Katharine did not know this, she only felt it. I have since discovered it by intellectual process.

Six miles from Umm Dubban was a settlement called Kartoum. We were told, very bitterly, by a resident of Fly Center (that is what used to be called an Americanism), that Kartoum was an extremely pleasant place. Those who lived there, i.e., were born there, were thrice blessed. (People who lived in less attractive places were twice blessed. The abhorred jitters were once blessed, that is to say, they were blessed with life but automatically threw away the blessing by denying the chief value of life, stability. At the time this appeared perfectly natural but now I recognise its illogic. Yet some years passed before I thoroughly eliminated the sense of guilt induced by my new mode of life.) In those days we used to accept a name as a thing-in-itself, an actual physical entity like a cat or a spear. When I discovered that names are the products of events and experience I could never rest until I had traced a new one to its genesis. The inhabitants of Kartoum were amused by this curiosity of mine. They said Kartoum was Kartoum, a thing-in-itself, or, as words could sometimes be transmuted, it was an elephant's trunk, but then an elephant's trunk was Kartoum,

just as a house was a maison, because some people said one thing and some said the other—and just as Umm Dubban had been Italian trader, or something like that. They thought the whole enquiry was nonsensical, and they couldn't understand a young woman like Katharine bothering her head about me until they learned that she was a natural jitter, when they became cold and over-polite and went about their business. (They knew that I belonged to the river country and imagined that I was passing through a period of mal-co-ordination—a kind of juvenile delinquency that I would leave behind when I became mature, and would for ever regret.) But I must tell you the truth about the name of Kartoum, for it is a matter of historical interest. This country was once dominated by a people called the British (they helped to form the language which I write). The head of the administration was known as the Governor-General, and, in accordance with the usual practice in these parts, when he died an enormous monument was raised over his mortal remains. There is little doubt in my mind that this settlement had been originally named after one of these Governor-Generals. I have not been able to trace one named Carr (my records are fragmentary, as I will explain later) but Kartoum is almost certainly a corruption of Carr's Tomb. (Carr was a common English name, like Ford, Disraeli and Wigg. Cf. Carlisle, Oxford, Diss, Wigan.)

I was sitting near the river-bank one day with Katharine. I was telling her how in the past it used to be possible to clap your hands and servants would appear bringing cool drinks. She laughed and said the mad wriggles had gone to my head and if she weren't such a pronounced jitter herself she would be afraid of me. I replied that she ought to be afraid of me even if she was a jitter because I had a great fund of useless knowledge which gave me power in love. I put my arm round her waist and drew her to me, so that she fell half across me. I tried to kiss her but she teased me and averted her mouth. I bit her ear, she gave a little scream and took a handful of my hair and raised my head up. She was laughing, with glad kindness

shining in her eyes, when she suddenly let go my hair, my head fell back and I knew no more.

I was half unconscious for about half a minute, I believe. When I came to there was a roaring in my ears, and I felt grains of sand settling on my face, and could see a fine cloud of dust floating through the air. I put my hand to the back of my head, where I felt a slight, sharp pain. Then I sat up and looked at Katharine, who was extremely pale and clutched my other hand tightly. I began to ask her what had happened, but at first she would not answer. Finally she pointed over my shoulder and said, 'Look!' I turned and about a hundred yards away I saw a pall of dust floating in the air like a heavy cloud. At first it was impossible to see what the cloud concealed. Slowly it cleared away while we sat, clutching hands, feeling frightened and apprehensive. We had been joking about mysteries, the power of wriggles, and something had answered with a bang. Finally we saw the ruins of a low building where previously there had been nothing—or rather, a mound of sand. We looked at each other without speaking, then went across to look, still gripping each other's hands.

Large parts of the world today conceal far more beneath the surface than they have to show on top. Men have been making and building for many thousands of years, and every so often comes an Explosion or a Whirlwind which covers up their handiwork. Then the following generations of men start building on top of their ancestors, and the same process is repeated. Houses, palaces, offices, theatres, public lavatories, vehicles such as trams and buses, perambulators and diving bells, bridges, pavements, culverts, waterworks, not to mention all the personal objects of domesticity and pleasure with which men once surrounded themselves, such as chessboards, egg-whisks and screwdrivers, are hidden from view. Sometimes these things become uncovered, but usually by accident, and it is rarely followed by investigation—not in my part of the world, anyway, for curiosity is practically a cultural crime. But there is another kind of legacy that our predecessors have left, and that is buried engines of destruction, whose principle I do not understand. Now and again the normal pattern of our life

is disturbed by a roaring and a shattering and a raining down of rocks and bricks and pieces of iron, and it appears that this is always the result of some chance collision. For instance; in my own case my head had struck an object which I will call a motivator—for our predecessors had learnt how to arrest the action of power. They could bury vast power-units in the earth (sometimes called mines, though this is a confusing term) which would remain sleeping until a message was sent (possibly by electricity, but they used other forms of movement also), whereupon the power would erupt in stupendous fury. And quite by accident, as I sported with Katharine, I had set off some mechanism which had been concealed by a British or Sinoese or Sophocratic engineer (who knows?) during one of their ancient struggles, but which had been forgotten or overlooked, perhaps as the result of some unexpected turn of the military situation.

We walked wondering to the newly disclosed building. Preservation in these sands and heat is remarkable for its perfection. The building had been partly shattered by the explosion, but what remained was fit for immediate occupation. We strolled, still fearfully, still clutching hands, through tiled corridors, looked into rooms which still bore the names of their ancient occupants, finally plucked up sufficient courage to sit in a chair behind a vast desk, on which stood (it mystified both of us at the time, a typewriter. But let me hasten to the most glorious part of our find. We came across a staircase leading to a basement. It was dark and even a little cold, although the sunlight was already pouring down the stairs—and suddenly I discovered that I was surrounded by books! Books stretching in every direction, books from floor to ceiling, with ladders at hand so that none were out of reach. I paused for a moment, feeling that I was an intruder, that this was a private sanctuary of the Powers. And then I realised the truth! I had been led here, led here by Katharine—and for once my father's shallow philosophy had been vindicated, for what other explanation could there be than that Katharine was an agent who had been sent to show me the way to my life's work? I impulsively kissed her, then snatched at a book. I tore greedily

through its pages—I still have an especial reverence for that work, unimportant though it was—it was about an American football team called the St Louis Cardinals. I could not drag myself away. Katharine squatted on the floor and laughed up at me. Hours later I staggered out, faint and realising suddenly how hungry I was. I went to bed from habit but could not sleep. I was up next morning as soon as the first light fell on my face.

I cannot describe the excitement that possessed me, nor need I describe the first undisciplined rush I made at those books. For a week I picked out scattered volumes and took them up on to the shady verandahs. I pulled a chair out of an office and read for hour after hour, anything that came to hand, still uselessly. But slowly an idea began to dominate my mind. I had been led to this treasure trove. I would be a failure, I might even be punished, if I did not organise my great good fortune. I even felt the Powers were talking to me in inaudible whispers, urging me to do the work for which I had been trained and selected. And it was just after I had, in one day, raced through the pages of Herodotus and dipped into Toynbee's *Study of History* that I realised quite clearly what it was I had to do. I must do for my own time what Herodotus and Toynbee had done for theirs. I must discover what had happened in the world since they wrote (at first I thought of them as contemporaries, though I now know that I am closer to Toynbee than he was to the Father), find out what had gone wrong so that today these two men and the civilisations they celebrated or warned are not even memories. I felt I had a double task because I was alone—I must combine the charm and humanity of the one with the critical acumen and intellectual dimension of the other. I knew I could not do it alone but I also knew that I could call on assistance. So the plan matured.

That day, the day of the find, was nearly twenty-three years ago. Katharine and I still camp on the same spot, only 'camp' is scarcely an accurate term, for we have made some of the offices into a home. We live in style, or should I say in the style of perhaps a thousand or a hundred years ago. In one room we had a blue-eyed baby who is now destined to be my successor.

I have also gathered around me a staff of scribes who busily copy but works under my direction. At the moment they are busy on Toynbee, Fisher and my first love, Herodotus. It was really Herodotus's descriptions of Egypt and the Nile that impelled me to my task. I believed then that the Powers had commanded me in their inscrutable way but I no longer acknowledge such superstitions. Have I not read Plato and Aristotle and Descartes and Hume and Voltaire and Marx and Freud? These are magic names in my household, but it is a strangely rational magic. Katharine and I now agree that it was an ant that set this great project on foot, because it was an ant that jealously bit her thigh and caused her to release my hair and set off the explosion. Magic is a power, as I will explain in due course, but it must be invoked. I was too ignorant and complacent to invoke anything except personal glory in those early days. Now my scribes are waiting to take these sheets so that the great Universal History will be completed in our lifetime. I may win incidental glory but our true aim is the recovery of the wisdom that men once had. And against it I will lay the folly for all to see.

Herodotus wrote of Egypt. My dear Katharine came from the North. She called it the land of Misery. Whether this was Egypt or not I cannot say but it may measure the gap between the days of Herodotus and our own. Herodotus said that no country possessed so many wonders, nor had any such a number of works that defied description—though I have read the same of America. The Egyptians did everything contrary to the other races of mankind. Perhaps I too am of Egyptian stock, and thus even closer than I thought to Katharine. I am tempted to write of those old Nile customs, the embalming of cats and the catching of crocodiles, but that must be left to my scribes. There is only one story I wish to refer to, the story of Pheron, who was struck blind. He was told that the only cure was to wash his eyes with the urine of a woman who had been faithful to her husband. After many fruitless trials he found one and the cure was effected. He married her and burnt the rest, including his original wife. After many years of ceaseless reading I felt my own eyes were growing weak. By midday a mist would obscure

my sight and I found it impossible to blink it away. My life was becoming a misery, I became short-tempered and once even spoke roughly to Katharine. I used to dream of unread books and blank pieces of paper. Then I remembered the story of Phoron. One night I silently left my bed and crept to Katharine's chamber pot. I bathed my eyes carefully, then returned to my bed and dreamt (I remember it well) that I read *The Sleeper Awakes*, an important source book. Next day my malady was cured and I have never suffered from it since. I recount this personal anecdote as it may be of interest.

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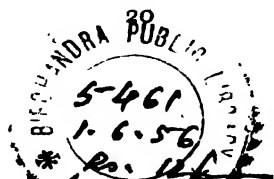
Where to start? A history of mankind from Adam and Eve (and doubts have been cast on their historicity) would have demanded too much time and energy from a single scholar. But there was a much stronger reason for beginning at a later date—perfectly adequate histories of the world up to about the middle of the Twentieth Century already existed. After that date the writing of serious history declined sharply, as I shall attempt to demonstrate later. (When I write of the Twentieth Century I am using one of many available dating systems. The one I have followed is the Christian calendar. The Christians were mighty warriors and imposed the greater part of their culture on all the peoples of the world, whether they liked it or not. They were so called after a prophet named Christ, whom they claimed to be God, i.e., the Chief Power, sometimes the Son of God, sometimes the Lamb, a symbolism that cannot be explained here, if it has ever been explained anywhere.) Nearly two thousand years after the birth of this Christ the production of accurate histories ceased. Up to about 1910 we can be fairly sure of our facts because the majority of histories were in agreement with each other, though they varied widely in interpretation. After that date the interpretation preceded the fact. Even the dates were at variance and in many cases obviously false. A vast number of histories were written (everyone who was literate appeared anxious to explain what was happening in terms of universal causation) but it was frequently difficult to realise that they pretended to be dealing with the same set of circum-

stances. In the past a political trend would be explained in a number of ways, e.g., as part of the march of democracy, as the destiny of a Master Race, as the inevitable advance of the proletariat, as the effect of an invisible bacillus. These differences persisted after mid-century, but in addition they were supported by false evidence, non-existent facts, shameless omissions and manipulated dates. Each writer had his own pet theory, sometimes politically motivated, sometimes occultly, sometimes lunatically. As the individual lost his importance all history became a kind of justification for the different power groups. Quite early in this period, for instance, we have works such as R. A. Butler's timid *Holding the Pass*, John Strachey's confident *Life Before Us*, each using the past as a prop upholding policies for the immediate future; then there were Mark van Doren tracing the steps to American cultural hegemony, A. P. Herbert demonstrating how all history logically paved the way for the rule of a tax-free Country House Party, Tosco Flywheel selecting a list of horrors and urging a scheme of mass-penitence 'before the mercy-seat of history', Gilbert Ponce identifying 'tenderness' with the Life Force (which was being throttled), an oddity named Stodge preaching that history demanded redemption through porridge (I don't know what he meant), and a three-volume work by Charlatan and Picklewit asserting that life was absurd and that history did not exist. At first I found this utterly bewildering and for two days became a convinced solipsist. I tried an experiment on Napoleon, a tribal leader of the Middle Ages who is dealt with in some detail and with a considerable measure of agreement by the earlier historians. Yet the only fact I can elicit from later works is that he was finally defeated on a playing field at Eton called Waterloo. Butler said he held some floodgates open (but doesn't say where), then tried to shut them but couldn't; Strachey says he was a pilgrim who took a message through Europe and lost it; van Doren that he was inspired by God to sell Louisiana to the Americans; Herbert that he was fundamentally a tax-free Country House man; Flywheel that the imagination 'boggled' at his adventures; Ponce that he lacked tenderness in his relations with his wife Josephine; Stodge that a statue should be

erected to him in porridge! Charlatan and Picklewit even claimed that there was no such person. What can one make of such a hotchpotch? And remember, I am citing from one language only. The Powers alone know what might be discovered if I could consult the Russian, Sinoese, Arabic, Esperanto and Dinka dialects.

After this plethora of strange studies and panaceas authority tightened its grip and only sanctioned histories were allowed to appear. The individual was eclipsed at about this time and did not recover control for something like twelve hundred years. The official histories (usually called 'authentic') were all alike, but it was a likeness I found it difficult to trust. They were monotonously concerned with proving that all history had been a preparation for the rule of the Pantisocrats or the Union Group or half a dozen others. If it had not been for a few bold heretics, who must have written in the teeth of the most alarming displeasure (and suffered accordingly, in all probability), we would know less about those thousand odd years than we know of Ur and Miletus and Amsterdam. As for the official or the authentic histories, I can't imagine anyone troubling to read them at all. Very soon the practice of writing history appeared to cease, fairly abruptly. People don't object to reading lies providing the lies are not obvious. It was once fashionable to read history but this fashion, like any other, needs its maintenance men. It wasn't long before the existence of history was forgotten. People reverted to mythology.

There is another solid reason for starting in the second half of the Twentieth Century. In the old history books you will find references to Ancient History, Classical History, the Dark Ages, the Middle Ages and Modern History. Now Modern History is like an elastic band, it never stays in the same place for long at a time. From the year in which I write, 3750 Anno Domini (I think), it is ridiculous to speak of the Nineteenth and Twentieth Centuries as Modern. From about 1450 to about 1950 I have decided to call the Neo-Middle Ages. These were relatively Christian, by which I mean they were dominated by the Christian military machine. From about 1950 to about 2950 I call the Late Christian Epoch (after Graves), that is, a



period when Christianity no longer existed but still exerted power by a kind of mortmain. And the outstanding event that acted as a watershed between the two periods was the discovery of atomic power and the dropping of the first atomic bomb in 1945. Before this discovery men's destructive impulses were immensely ambitious but lacked adequate support; after it there was further frustration. Men used their world like a punching bag which they not only punched but also kicked and stabbed and occasionally threw off the fire. They had to pass through this phase, they had to exercise their evil before they could start to despise it. Then they could start looking for wisdom. I find many historians used to scorn anything that was material and physical. Idealism is all very well, but it usually depends for its advances on material changes. The atomic bomb was not so important for the lives it cost (the population was already too large) but for the opportunities it gave to the malignant.

There was an astonishing spiritual and intellectual decay during the period I am referring to. Mentally, the man of the Twenty-Fifth Century was only a child compared with the man of the Nineteenth. The decay became noticeable in the second half of the Twentieth Century. The triumphs of science first of all destroyed poetic impulse (which needs constant nourishment) and later the necessity for intellectual activity. I shall refer to this in greater detail later. Political leaders first distrusted the imagination and did their best to dam and starve it; having succeeded, at least temporarily, in this they then discovered that the intellect requires an imaginative push before it will take the trouble to do its own work—but the discovery was made too late. For some centuries the human mind was in a state of stagnation, barely holding its own. Then came a *débâcle*, and a rapid one too. I mention this now because it had its effect on the study and practice of history. First of all the imaginative and philosophical approach to history was replaced by the statistical and pedestrian, but as intellectual energy declined the public for this kind of writing declined also, until at last historical writing ceased to be economically justified. It was the death of scholarship. History proper was

replaced by fantasy, which found expression in a kind of narcissistic fiction. All historical writing of value during the past two thousand years (with very few exceptions) has been fictional. Nor need we be too critical of this *genre*, providing the fiction is good enough. Why, even the great Toynbee put in a word for fictionalised history, and he was writing before the decline became obvious. Histories, he wrote, 'cannot entirely dispense with the fictional element'. Now it will be obvious to every impartial reader that this history of mine does not contain even the hint of fiction. That is not a boast, it is a confession. Accident has given the task to me, and I am no Gibbon. The tradition is dead, and my scribes and I are trying painfully to resurrect it. Yet I would sooner grub among my facts and produce a few prosaic pellets of truth than give birth to a hundred 'authentic' historical fictions such as used to be imposed on authors by the censors. A preposterous mound of false notions about their life and antecedents lulled the public into a sense of well-being. They looked at the past and found it repellent (Shakespeare, Beethoven, Athens); they looked at themselves and swooned in self-admiration. They abused the world and each other with atomic fission, bacteria and death rays, and they sentimentalised their children into ungovernable louts. They hurtled round the world and later through the skies and never reached their destination. They peered at their microfilms while their vocabularies shrank to the size of a pygmy's. They rejoiced in their robots while their robots soullessly rejoiced in their masters' servility.

A few words about dating. We know when Antony fled from Actium and when Henry went to Canossa. We are vague about when the Sleeper awoke and we have only the barest notion when Ish Williams organised his tribe in California. It seems that the nearer we come to the present the less certain we are of when an event happened. Yet the causes of this tendency are much easier to understand than you might think. No writer during this period was truly free. He always felt the censor peering over his shoulder. He was supposed to glorify whatever messy little régime happened to be in power at the time. His work had to approximate in certain particulars to the official histories or

authentic fictions that jostled his own work on the bookstalls or mail order lists. If he allowed it to be supposed that he was even vaguely critical of the *status quo* he might never write again. For this reason it was essential very often to pretend that events happened earlier or later than they in fact did. One of the earliest examples of this occurred quite early in the Twentieth Century when the Russian Communist rulers considered it necessary to tell posterity that Stalin was a leader of their revolution, when, in fact, he assumed importance only some years later. Of all the subsequent historians who used this trick of post- or ante-dating to obscure their true purpose from authority, none was more cunning than H. G. Wells. He usually preferred to ante-date his disasters by several decades because it would have been unwise to lay the blame for them at the door of a certain type of prominent politician. Politicians are sensitive creatures. They resent criticism of like-minded forerunners (usually on nationalist or ideological grounds) as keenly as though it were criticism of themselves.

I do not know what happened to Wells but he almost certainly came to a violent end. (His personal history may have been similar to that of George Orwell, who disappears in the mists of a concentration camp named Jura, near the Arctic Circle.) There is a strain of petulant discontent with the society he lived in evident in all Wells's work, which he found it impossible to mask absolutely, despite the great care he took in the technique of misdating. He tried desperately to pass himself off as a mere story-teller, but it was courting disaster in those days merely to hint at the truth. Wells is important to all of us. He is one of the most important sources in our examination of the new age of barbarism. In the past men had found it possible to destroy, or at least to cast out of their minds, the memory of certain events. There was the Chinese Emperor who temporarily annihilated history by burning the books (as it has been annihilated more recently by burying the books); there was the Catholic Church, which successfully denied that there had ever been a female Pope; there was Hitler, who convinced millions of fellow-countrymen and others that the German Army had never suffered defeat. But some things cannot be

treated as though they had never been. The memory of the so-called Martian invasion, for instance, would live as long as men lived. But Wells found it necessary to pretend that it happened much earlier than it in fact did; he did not dare to accuse a managerial régime of defeat or incompetence.* It was therefore literally a matter of life or death that the author should hold an earlier régime ('democratic capitalism', to use the jargon) responsible.

I will give one more reason for this irritating practice of the later historians, and then I will be done. During the first period of the Mechanical Revolution (Eighteenth and Nineteenth Centuries) few political and social leaders realised the importance of the new inventions. In fact, many of them were resisted, such as the railways. But by about the middle of the Twentieth Century, when it had become entrenched in everyone's mind that technical progress was of first-rate importance (spelt power, in fact) it also became a matter of prestige. Each country began to claim the honour of inventing the new machines which characterised the Age. The Russians were again the first to do this—the Russians, who had been so technically backward and had now become so propagandistically forward, began to claim the aeroplane, the submarine and the discovery of electricity as Russian achievements—against all the evidence, but the evidence was concealed from their own people and pseudo-evidence manufactured. After that it became a commonplace for 'all inventions and discoveries of the New Age to be ante-dated. The Americans or Germans would fondly imagine for several decades that they had been responsible for inventing the transfigurator when up would jump an Indonesian or Finnish patriot and produce incontrovertible evidence that his people had had it for years previously and had thought nothing of it. In fact, a school of Hindu metaphysicians announced that all the 'modern' techniques had been known to their ancestors a hundred generations earlier but had been set aside as worthless toys. Historical truth was no longer respected. Therefore most of my dates are suspect and I have tried to dispense with them as

* Although hailed as a great victory at the time, the measures taken against the 'Martians' were quite ineffective, and were recognised as such some years later.

THE NEW HERODOTUS

much as possible. Herodotus never bothered much about them—nor did Toynbee for that matter. As an example, the evidence I have managed to collect suggests that the first fully automobile robot appeared as early as 1962 but it may well have been twenty years later. We simply don't know. We are much more certain about the date of the first Flying Shuttle—certainly than of the first Flying Saucer.

Now I am ready to plunge into the Twentieth Century, and I hope you are too. What was called the Second World War had just ended. Three large empires were shuffling uneasily, preparing for the Third World War. Everyone was scared of atomic bombs but everyone who possessed them was prepared to drop them—for defensive purposes only. And then, almost without warning, there came an invader from the skies.

The 'Martian' Invasion

THE INVERTED COMMAS denote doubt or mistrust. I have good reason to believe that the invasion of the Earth (often called Terra in later histories) from another planet so carefully described by Wells was ~~not~~ Martian. I will give reasons for this later when I deal with the settlement of Mars. It is just possible, however, that Wells knew he was leading his readers astray. There may have been sound reasons for doing this. It was more acceptable to admit that Earth had been invaded by a planet which was later colonised by men than by another race on whom Earth was never revenged. But more than this I cannot say. The records are reluctant to state Earth's failures.

But that an invasion took place cannot be doubted. In fact thoughtful men, especially those who were not blinkered by false ideas of prestige, had been expecting one for some time. It was normal newspaper gossip to talk about expeditions from Earth to other planets. It 'wasn't done' (a British phrase, meaning at most 'inconceivable', at least 'reprehensible') to speak of an expedition in the reverse direction. Yet those who managed to keep their heads were aware that some of the other planets were much older than Earth, and that life on them was likely to be correspondingly more advanced. (It was the usual practice to deny the possibility of life on other planets, though without any rational basis. The normal qualification of 'life as we know it' was made, as though that mattered. Why shouldn't 'life as we don't know it' exist?) From the middle of the century there was a rash of Flying Saucers, i.e., unknown objects in the sky. Some scholars claimed they had been seen for several centuries. The authorities were worried and tried to

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explain the phenomena away, largely on security grounds. But some things could not be hidden. A commercial traveller, for instance, claimed to have seen one of these objects after it had landed, and the little 'men' who had got out. He thought they were from Venus. Then the censorship clamped down and the little 'men' were not heard of again. Most of the reports came from America, though by no means all. The Americans claimed that this was natural as the expeditions were exploratory and understandably paid more attention to North America than any other portion of the globe, as it was the most technically advanced.*

Wells's date for the invasion was, as usual, quite unreliable. He refers to the Lisbon earthquake, 'a century ago'. This would have established the invasion as occurring somewhere about the year 1855. We know far too much about the Nineteenth Century to accept such a date. In another place he says the invasion came 'early in the Twentieth Century'. The lack of agreement between these two dates makes it quite certain that Wells was hiding the truth. Personally, I doubt if the invasion could have taken place before 1960. Wells then gives an account of conditions on Mars, which was fairly accurate, but it only described conditions on the actual planet concerned by analogy. It seems likely, however, that this planet was similar to Mars in both size and age. The 'Martians' were subject to the same influences, e.g., weaker gravitational pull, as the inhabitants of Mars itself. It was this similarity which may have caused Wells to make his mistake in identification, allied with certain astronomical coincidences. Scientists such as Schiaparelli had noticed fluctuating appearances in the markings on Mars, and both the Lick Observatory and Perrotin of Nice had seen a great light on its surface. Wells naïvely (or cunningly) imagined this to come from the casting of a huge gun. Then Lavelle of Java claimed that there was an immense outbreak of incandescent gas on Mars, moving with enormous velocity towards Earth. The general opinion was that a heavy shower of meteorites was falling on the planet, which was

* For an examination of early visits from other planets, see *Flying Saucers Have Landed*, by Leslie and Adamski.

probably true. These phenomena were either entirely coincidental with the actual invasion or they may even have been stage-managed by the invaders to draw attention away from the true origin of the invasion. If this is correct, they were entirely successful. The invasion was accepted as Martian until chance allowed me to see through the deception.

The motives for invasion are therefore obscure. Wells argued that the invaders were faced with the exhaustion of their own planet, but he was arguing from false premises. It is true that Mars was approaching its end as a supporter of life, but it is by no means certain that Planet X was in the same condition. Nevertheless, it is possible that vegetation and water did attract the invaders, as they have attracted countless invaders in the past. Both Hun and 'Martian' appear to want the same things.

Now is a very significant thing that the invaders struck at England. England was part of Great Britain, which had been the head of a relatively short-lived Empire that had aroused the mingled fury and admiration of the world. At this time Britain was converting her Empire into a Commonwealth, a union of independent, semi-independent and dependent States, largely as an act of contrition. The English possessed certain characteristics which were rarely found among other races, and these could almost certainly be traced to the abnormal security they had enjoyed for nearly a thousand years. There had been no foreign invasion of England since 1066—a record greatly envied by the French, Germans, Poles and Russians, indeed all the other nations of Europe. The secret of this immunity was the fact that England was an island, and it was only necessary to maintain a Navy larger than any other people's to keep the foreigners out. The English, however, came to regard their immunity from conquest as evidence of national excellence (particularly moral excellence) and natural superiority. They evolved a peculiar religion in which God was at first an Englishman and later a Scotsman. (The Scots were the most English of all the English.) While the English reviled all races who set themselves up as Lords and Masters (e.g., the Germans and Japanese) they regarded as perfectly natural and even part of the divine plan that they themselves were God's representatives

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on Earth. The rest of Europe could not see beyond the English Channel and missed this native excellence, referring to their strange neighbours as 'perfidious Albion'. The English in return, apart from periodically blessing the Navy (the sailors were ill-paid and often shockingly treated, so that a blessing was a form of compensation), assumed that this excellence derived from moral virtue. They concluded that pleasure was suspect and that the emotions were the Englishman's greatest enemy. The pursuit of pleasure weakened the will and as the path to pleasure normally lay through emotional indulgence they laid a taboo on it. Their hatred of love was at times pathological and they tended to regard it as a disease of adolescence. (The law courts were particularly harsh in their attitude to adults who succumbed to it.) The adjective 'un-English' was invented to describe socially undesirable conduct. They referred to their country as 'the right little, tight little isle', and it was customary for writers to publish eulogies of the Island Race, commending especially their modesty and sense of humour. I give these facts for what they are worth and do not intend to return to the subject. I might add that they imposed their language on large parts of the Earth, but I do not take this amiss.

The English slumber was rudely disturbed by the 'Martians'. But this was only the beginning of a period in which the 'fair land of England' (I quote from an author who lived in Sheffield) was ravished and devastated by enemies human, planetary and bacillary. It was as though history was avenging itself on this favoured race, cramming a thousand years' worth of disaster into a hundred or so. I once read in a curious book that the population of the world is always steady and that the fears of over-population, so strong in the Twentieth Century, were groundless. It is only when men start counting that they are appalled by figures which had previously existed but had been unrealised. Similarly I think there may be a Law of Catastrophe, that over a given period, say two thousand years, each country and each race will suffer equally. Again I make these observations for what they are worth, which may not be much.

The 'Martians' first struck near Woking, not far from the English capital city, London. It was August (August was a

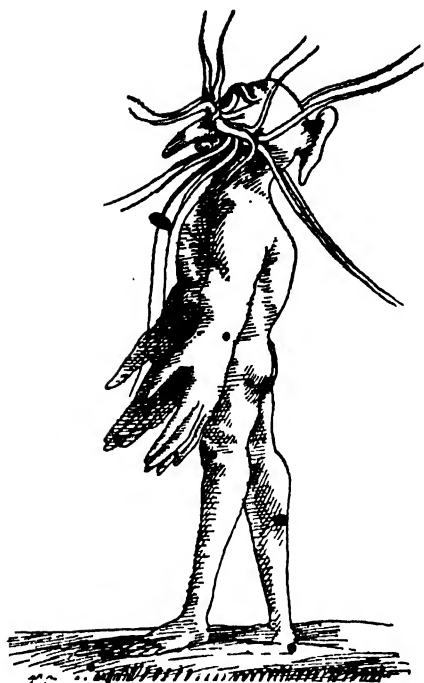
month famous for its Bank Holiday, i.e., National Rainy Day). Mr. Wells gives a vivid description of the first 'Martian' who climbed out of his cylinder.

Those who have never seen a living Martian can scarcely imagine the strange horror of their appearance. The peculiar V-shaped mouth with its pointed upper lip, the absence of brow ridges, the absence of a chin beneath the wedge-like lower lip, the incessant quivering of this mouth, the Gorgon groups of tentacles, the tumultuous breathing of the lungs in a strange atmosphere, the evident heaviness and painfulness of movement, due to the greater gravitational energy of the Earth—above all, the extraordinary intensity of the immense eyes—culminated in an effect akin to nausea. There was something fungoid in the oily brown skin, something in the clumsy deliberation of their tedious movements unspeakably terrible: Even at this first encounter, this first glimpse, I was overcome with disgust and dread.

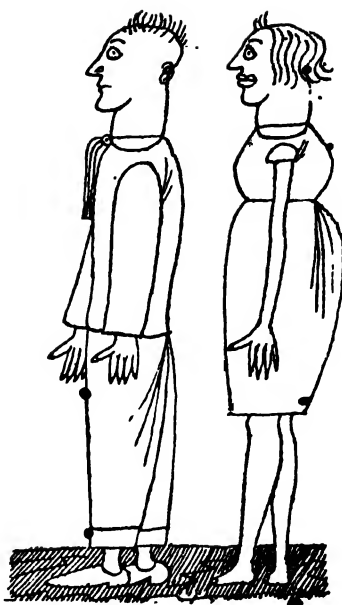
The observer's dread was understandable, apart from any barbarity of appearance. The 'Martians' possessed the heat-ray, at that time unknown to men.

What strikes the historian is that the coming of the 'Martians' appeared to paralyse the men of Earth. These men, especially the Western Europeans and Americans, had prided themselves on being activists, who would always respond positively, even violently, to a new situation. Yet this situation appeared to be beyond their scope. We know they had reached a fairly high standard of technical and scientific achievement. They had learnt how to use atomic power. They were flying at a thousand miles an hour (this was before the invention of the hyperdrive). And yet their response to this sudden danger was pathetic. No one knew what to do. It must have occurred to many people to drop an atom bomb on the Martians, yet it wasn't done. The atom bomb was at this time comparatively new and had not been assimilated into and accepted by the human consciousness. At a pinch the English would have dropped one on Moscow or Peking but they shrank from dropping one on Woking. Instead of taking immediate action against what was obviously a hostile foe they tried to console themselves with the thought that the 'Martians' would be defeated by gravitation. A 'Martian' would weigh three times

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*Grossa group Martian
(according to Parisom)*



*Twentieth Century
man + woman (Reconstructed).*

as much on Earth as on Mars, but his muscular strength would be the same. The wiseaces overlooked two factors: (a) the invigorating influence of excess oxygen in the terrestrial atmosphere, and (b) the obviously high standard of 'Martian' intelligence.

Another factor in human habit that accentuated the slowness in their response to a totally new challenge was the tradition of national rivalry. Wells himself says that the 'Martian' landing caused a smaller sensation than the outbreak of one of the traditional World Wars would have done. People had become conditioned by artificial patriotic emotion to feel sensations of hatred and animosity against their human rivals. But to them

'Martians' were creatures of fiction, not to be treated seriously. It is even probable that many people regarded the whole thing as a hoax. (Imagine the immediate mobilisation that would have taken place if the Russians, not the 'Martians', had landed!) The first evening paper that received a report even suppressed it. The rest of the world was openly delighted by the plight of the 'tight little isle'. A French politician advised the British to oppose the invasion with 'a stiff upper lip'. A German paper urged them to call out the Navy. An American radio comedian announced that the British Prime Minister had suggested a trial of strength with the 'Martians' at Lords. (This is an obscure reference, but obviously not a friendly one. Lords was one of the Chambers of the British Parliament, originally inhabited by brewers, but by the time of the invasion champion boxers and jockeys had also taken up residence there.)

The military authorities took the situation more seriously, but their measures were pathetically inadequate. Two companies were deployed, later a squadron of hussars and four hundred men from another regiment, equipped with two old-fashioned guns! (It was said that the English always began their wars in this fashion.) The general belief was that the soldiers would make an easy capture. A controversy actually broke out as to whether the captured 'Martians' would be more at home in the War Museum, the Natural History Museum or Regent's Park Zoo! It was certainly agreed that they should be taken alive, if possible, and questioned.

It did not take the 'Martians' long to destroy British complacency. They attacked with machines utterly unknown to Earthmen. They were like monstrous tripods with articulate ropes of steel. Far more flexible than tanks, they could overstride obstacles and move at the speed of an express train (100-150 k.p.h.).* They wiped out all opposition with heat-rays, including Woking itself and Weybridge and Shepperton. The Army's preparations were like 'bows and arrows against lightning'. In their advance on London the 'Martians' also used a

* This does not seem very fast. But we must remember that Wells had to keep his story consistent. It is more likely that the invaders had a cruising speed of something like 250 k.p.h.

poison gas which was dubbed Black Smoke. It was unknown to men and slowly sank to the ground in the form of dust. Organised resistance ceased, except for the preparation of mines and pitfalls. It is interesting to recall that the crews of naval vessels sent up the Thames mutinied! It was no good thanking God for the Navy now. The population of London, including the Government, fled. It is quite obvious that the British were completely unprepared psychologically. Some of them had encountered poison gas before, and if the enemy had been human they would have taken measures to counteract it. There is absolutely no mention of the Air Force. I attribute this to the well-known British reluctance to desecrate their own land except with mock-Tudor houses, rubbish dumps and crazy paving.

It is quite clear that the 'Martians' were in no hurry. Their aim was not extermination but complete demoralisation. What they did not reckon with, what they could not possibly have foreseen, was the traditional British failure to know when they were beaten. There had probably been nothing more terrible than the evacuation of London since the days of the crumbling Roman Empire, when whole populations fled before the barbarians. Men had organised evacuation, and done it very efficiently, before now. There had been reception centres, food and ambulance and casualty stations, and an authority to inspire courage with its propaganda and advice. Above all, there had been direction and information. But now there were none of these things. London was utterly unprepared. The evacuation was 'no disciplined march', wrote Wells; 'it was a stampede—a stampede gigantic and terrible—without order and without a goal, six million people, unarmed and unprovisioned, driven headlong. It was the beginning of the rout of civilisation, of the massacre of mankind'.

If the 'Martians' aimed at demoralisation they certainly succeeded in dealing a severe blow to the peculiar English religious faith. Like the other European nations, the English worshipped Christ but in a typically national guise. He was depicted as a 'clean-living' Englishman, the main tenet of whose

In all probability nearly ten million.

creed was a severe sexual morality. It is doubtful if the term 'faith' can accurately be used of Twentieth Century religion. The passion and the mysticism had departed and left as ashes some cold moral precepts and the law courts. Yet there was still a vague notion that God did exist and from time to time intervened in human affairs. However, the 'Martian' invasion struck hard at these underlying convictions. It was so obviously not the work of man. It came from outside but at the same time it seemed quite senseless. The view arose that while God would allow (as He certainly had allowed) men to slaughter each other, He would not have allowed them to be slaughtered by some other race. The effect of this in a large number of cases was that God was no longer believed to exist and that the system was governed by chance.* But there were also others who reverted to the early Christian idea that God was punishing a wicked people and that the 'Martians' were His ministers. These, it scarcely needs saying, were the un-English section of the population and probably derived from Jewish, Flemish, Frisian, Irish and Huguenot ancestry.

When the first phase of rout was over strenuous attempts to reorganise and cope with the disaster were made. The Government reassembled at Birmingham, one of the centres of English philosophy. A plan was drawn up to lay a series of automatic mines across the Midlands. The rest of Europe, having enjoyed the first ecstasy over British discomfiture, was betraying signs of uneasiness but still no help arrived (though the matter was being debated in the United Nations Organisation Assembly, a body whose main aim was to make international insult a matter of public practice). An announcement was made that bread would be distributed to the population, but this measure was in fact never adopted, partly owing to a dispute among the medical advisers of the Government as to whether white or brown bread would be most beneficial. A new danger was arising, for hunger was causing riots and attacks on farms, transport in the South having broken down completely. Committees of Public Supply began to requisition food in the towns.

* A view, I might add, that the study of history led me to support independently until a sudden flood of common sense warned me that it was impossible.

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And then Britain's European neighbours awoke to a sense of responsibility. French, Dutch and Swedish fishing smacks, as well as various commercial vessels, began taking people off the East Coast.

Perhaps I should say more about the biological and physical structure of these beings who were terrorising one of the greatest of the terrestrial powers. Their huge round heads were about one and a quarter metres in diameter. They had no nostrils and no sense of smell, very large, dark-coloured eyes and a fleshy beak. They carried a single ear behind. In a group round the mouth were sixteen slender, whip-like tentacles, in two bunches of eight each. The mouth opened directly into complex lungs. They had a heart but no digestive apparatus, for they neither ate nor digested. The organism was kept alive by the injection into the veins of fresh, living blood from other creatures. The provisions they brought with them from their own planet were portions of creatures resembling human beings. Earthmen mistakenly assumed that this was cannibalism (a logical error attributable to the prevailing sense of panic) and the horror and disgust felt for these creatures was correspondingly increased. In brief, they consisted of heads and brains only, with enormous nerves transmitting sensations from the eyes, ear and tactile tentacles. They differed from men in three other marked ways. They never slept. They had no sex, and no corresponding emotions. (If the English had had time to think this would certainly have impressed them, and might have led to an Entente Cordiale. Wells himself regarded this lack as evidence of the highest cultural development.) Young 'Martians' budded off, in the manner of the fresh-water polyp. They were also not subject to disease, a more admirable quality. The deduction was either that there were no micro-organisms on their own planet, or 'medical science had eliminated those which had once existed. Wells believed they communicated without any physical intermediation. They wore no clothing but did not seem to suffer from changes of temperature or pressure. Instead they wore a variety of complex machines, that is to say, they had a great variety of artificial additions to their bodily resources.

In Wells's view they were descended from beings not unlike men, but had developed out of all recognition by the gradual adaptation of brain and hands at the expense of the rest of the body. It was this that helped to paralyse the response of men to the new challenge; in one sense they were a development and refinement of humanity, in another they represented a horrible victory of what men considered their least human properties. This latter reaction gives us an interesting insight into the mind of 'enlightened' Twentieth Century men. They tended, with good reason, to be disgusted with themselves. But this disgust chose for its object those faculties in men which were his chief hope of salvation. The mechanistic outlook of the scientific age led to a demand for a mechanised man. It was felt that men would never conquer their own worst impulses except by rooting out the vehicles of those impulses. The best and the worst works of men had been the products of imagination and emotion. The Twentieth Century mind believed that the annihilation of these qualities, especially through the elimination of sex, would render man powerless for evil. Instead it tended to render him powerless for good, while the now uninhibited intellect had not the vision to undertake works of greatness, glory, mercy, generosity or wisdom. You might say that men knew part of the tree was poisoned and slashed at it wildly with an axe and carried away the healthier branches. Both Ancient Greece and New Crete have stated the truth, that controlled emotion is the true source of glory. New Crete had not yet been born but the Greeks had spoken and still spoke, but to deaf listeners. Wells and many others were disappointed in their hearts that the 'Martians' were destroyed. They believed that a higher form of life had succumbed to a lower. In fact, the invaders were a much greater menace to the Europeans than the Huns had been to the Romans. The Huns were capable of love as well as hate. The 'Martians' were only capable of a slide-rule logic which was at bottom misanthropy or the 'Martian' equivalent.

The English had been shown up as nearly human after all*

* A Dutch scholar had conducted an enquiry into this point and had concluded that there were traces of humanity in the English character.

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yet, to the chagrin of their rivals, they claimed all the credit for the defeat of the invaders, though it was quite unmerited. The 'Martians' were in fact defeated by a microbe which they were unable to resist, lacking all immunity to such creatures. They had brought with them a Red Weed which proliferated wherever there was water. It was this Weed which first succumbed to the bacteria, rotting quickly and choking rivers and streams. A little later the 'Martians', who had by now occupied London, began to wilt and sway on their enormous stilts and finally collapse. The end was as sudden as the beginning. The 'war' had lasted for a month. The English nation, which only a few days before had faced annihilation, suddenly gained a reprieve. The French Government celebrated the occasion, and possibly attempted to veil its previous indifference, by sending bread. Apart from the destruction of buildings in a limited area, the remains of the Black Smoke and the Red Weed, and the rotting carcasses of the 'Martians', there was little to demonstrate the agony through which the nation had passed. The English made the most of it. Special thanksgiving services were held in which they congratulated each other on their magnificent victory. The Queen, who already called herself Defender of the Faith, now adopted the additional title of Saviour of Humanity. Other nations suggested ironically that the microbe responsible for the 'victory' should replace the lion or bulldog as the national emblem, but the English rarely took advice from foreigners.

In passing I should like to add that it is by no means certain that the invaders were destroyed by bacteria. It is more than likely that the creatures that shared Earth with men, the Vitons, may have come to the assistance of their terrestrial colleagues. But at this time the existence of Vitons was unsuspected by men, and I must leave discussion of them to a later chapter, only stating at this point that a world devoid of men, especially men with emotional systems, would have been uninhabitable for the Vitons.

This most instructive event in the history of our race had certain very important consequences. Wells believed that the attack was purely exploratory. He expected a much more highly organised expedition to arrive when it was realised that

the first had failed. Others, however, including the eminent scientist Lessing, were of the opposite opinion. Observation suggested that a similar landing had been made on Venus, and that it had succeeded. This produced a widespread sense of security on Earth which has been fully justified. By the time of Wells's death (perhaps early in the Twenty-Third Century) there had been no renewed attack from the same quarter, and I have no evidence of one since then. In fact, I know of no other attempted invasion of Earth from another planet,* unless we except the conspiracy of Enro the Red, of which we know little. In any case, my sources are fragmentary. Again, I think the Vitons acted as a defence force for the protection of Earth. They were parasites on men and without their hosts could not have lived. This is Russell's view, a view we must respect.

The more thoughtful people believed that the invasion would hasten what many of them considered man's only chance of survival, i.e., world unity. When men would not unite to prevent themselves destroying each other they might be expected to unite to prevent others destroying them. But world unity, apart from one abortive effort, was still a long way off. This was partly due to the presumptive 'Martian' colonisation of Venus, which seemed to remove the external danger, and partly due to the British insistence that they had alone driven off the enemy and that they were the custodians of a new Pax Britannica. British psychology at this stage affords an extremely interesting exercise in national psychology. For over a century Britain, backed by her Empire, had been the major world power. Unbiased observers were already aware that by 1950 Britain no longer enjoyed this predominance and had in fact taken third place to the U.S.A. and the U.S.S.R. Such ranking did not satisfy British *amour propre* and they snatched at this opportunity to recover their waning influence. The result was in fact the reverse of what they anticipated. The rest of the world talked scornfully of Britain's 'Microbe Army' and British unpopularity returned to a level it had not known since the year 1900. If there was a glimmering of spiritual unity in the rest of

* I am not forgetting Bocker's Hypothesis, which I refer to in a later chapter.

THE 'MARTIAN' INVASION

the world it was directed against British pretensions rather than 'Martian' threats.

The scientists, whose politics are usually extremely naïve; were encouraged to devote their attention to the now obvious possibility that where the 'Martians' had failed men might succeed. It was at this time that the foundations were laid for that fantastic period in human history that I call the Space Era. But compensating this abnormal growth of human arrogance was a new humility which was to be found particularly among intellectuals. Men might discover how to reach Mars but it was apparent that in technical ingenuity and scientific knowledge they were still comparatively backward. And also at the back of many a nervous mind was the knowledge that men had been fortuitously saved by a despised microbe. They were to become even more conscious of the microbe's power in the days of Nordenholt and Isherwood Williams.

Freedom versus Tyranny

THE ESTABLISHMENT OF personal freedom as the chief good in communal existence began at the time of the Renaissance and the struggle for it reached its peak during the Twentieth Century. As so often happens, it attained its most strident expression just before its hope of realisation collapsed. The heroes of individualism and freedom were men who helped dig their own graves. Just as political virtues had previously attempted to oust religious virtues, so now technological virtues were about to replace political virtues. Within a generation after the main struggle for freedom (or democracy, as its political expression was called), the thing itself had disappeared. It no longer existed even as an aspiration. Its enemy, tyranny, had apparently won. Yet at the moment of victory tyranny also disappeared. The thing itself, if it is possible for it to have existence outside of men's minds, certainly continued to mould men's lives. But men no longer thought in the same terms. Very rapidly they ceased to consider themselves as either free or unfree. These terms lost their overriding importance. Men's minds no doubt exist to be irritated, but there are fashions in irritation. After the Twentieth Century the only thing that appeared to matter was technical efficiency. Men did not find happiness in religion or in freedom but in their awareness of their own and, more particularly, their community's technical capacity. It was this mode of valuation that finally destroyed the civilisation that neither God nor dictators had managed to annihilate. Man had fortified the front entrance of his dwelling but had left the rear undefended. My true work is to narrate how this happened

The second half of the Twentieth Century was dominated by the Third World War. Compared with the first two this was a rather undistinguished affair. Documentary evidence of how it broke out and the course it took is lacking. All I can say is that it began in about 1965, ended in about 1985, that some atomic weapons were used, that warfare was probably not continuous (in fact, periods of uneasy peace may have outnumbered in years the periods of actual fighting) and that in all probability no important principles were involved. Before the war broke out the only areas in the world where the semblance of democracy managed to exist were Western Europe and Australasia. After the war broke out even these areas had to jettison democracy in self-defence. One of the lessons of the Twentieth Century was that huge-scale industry and continental planning could not co-exist with democracy. The old national groupings of the past rapidly disappeared and were replaced by great power-blocs. As they fought each other their differences disappeared and they resembled Tweedledums fighting Tweedledees.* The only principle at stake, if we can call it a principle, was a desire for domination. To speak of self-preservation would be erroneous as there were no powerful stimuli urging one power to attack and destroy another. One writer, George Orwell, even supposed that these behemoths not only were not fighting for self-preservation but also were not really concerned with domination. The main aim of the war, he said, was to keep the masses occupied. This theory certainly explains the episodic character and indecisive conduct of the war. It continually went to sleep but awakened angrily when people became restive. Orwell's view was that nothing made people more restive than the effort of thinking. If they have nothing to do they are reluctantly compelled to think (the only alternative is Pleasure Cities for all) and thought always results in discontent. There is much in this.

The best introduction to this period is to be found in the work of a Roumanian historian named C. Virgil Gheorghiu, called *The Twenty-Fifth Hour*. Roumania was one of the small nation-states that littered Europe until they were engulfed by

* Epic heroes of old English folklore.

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the vast power-block already referred to. It was chiefly notable for its genius in choosing the most advantageous side to fight on in war—quite unlike its unhappy neighbour, Bulgaria. In fact, Bulgaria's adherence to a party in military conflict usually led to acute despondency in the camp of the chosen ally. There are hints in some of the writings I have examined that huge bribes were sometimes offered to Bulgaria's rulers to persuade them to assist the enemy. Returning to Gheorghiu, his conviction was that men were willing themselves to become machines. Envious of the machine's freedom from pain and emotional disturbance, they believed that man's destiny could only be reached through mechanism, and that the old ideal of oneness with God must be replaced by approximation to the machine. But let me state the situation in Gheorghiu's own words:

Men are suddenly being forced to live and behave according to technological laws which are foreign to them. Those who do not respect the laws of the machine—now promoted to social laws—are punished. Man, living in a minority, gradually develops into a proletarian minority. He is excluded from the society to which he belongs but in which he can no longer be integrated. As a result he grows an inferiority complex, a desire to imitate the machine, and to rid himself of those specifically human characteristics which hold him at a distance from the centre of social activity.

This slow process of dehumanisation is at work under many different guises, making man renounce his emotions and reducing social relationships to something categorical, automatic and precise, like the relationship between different parts of a machine. The rhythm and the jargon of the mechanical slaves, or robots if you like, find echoes in our social relationships and our administration, in painting, literature and dancing.

Gheorghiu perhaps did not realise how close the actual robots were. But the robots, when they came, were made by men. The machines got there first and men were faced with the fact that they themselves were inefficient robots. But more of that later.

Gheorghiu continued:

In the end men will no longer be able to live in society and yet keep their human characteristics. They will be treated as equal and uniform, and the law of mechanical slaves will be applicable to them. No allowances will be made for the fact that they are

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human beings. There will be automatic arrests, automatic condemnations, automatic amusements, automatic executions. The individual will come to be as absurd as a piston or a machine part that demanded to lead a life of its own.

Gheorghiu was writing of contemporary events. He was a man of tradition, proud of his Roman name, an admirer of the religious poet Eliot. But living alongside him were men who had been thrilled by the 'Martians' or had even seen them. They were the forerunners of H. G. Wells and with him they accepted the robot as a more highly developed tool of society. In their view individuals were absurd. The only excellence of a man lay in his relationship towards an integrated social whole. He had no autonomy, he existed for service. The war they started in 1965 was not an issue between Communism and Democracy, although these terms were still in use, as from habit. It was a civil war inside Western Technological Civilisation, between those who understood and those who did not. We see here the unnoticed birth of a new mystery which I shall have occasion to refer to again.* The American Democrats were as oblivious of individual rights as the Russian Communists. Gheorghiu records the outbreak of war and then stops. From his point of view the most significant aspect of the struggle was that men joined armies without enquiring into or caring about the causes they fought for. Membership or attachment was a confirmation of status. Without it they would have been expendable. With it they could claim a daily ration of food.

But before I continue I feel compelled to make a statement about the source-material from which I have constructed this history. I know that these matters should be put in footnotes or, if too long, in appendices, but I am not a trained historian and in any case I doubt if many people read appendices. If a writer's defence of his method is ignored by his readers how is he to show his face in a world always ready to believe the worst? It is only fair to me to make it known that the traps and snares awaiting the unwary are as many as the mines that lie hidden all over the Earth's surface to this very day, so that not even lovers can sport without being in danger of instant annihilation!

* See the Sacred Order of Scientists, chapter 10.

For years I read accounts, written in all sobriety and apparent good faith, of events that it was quite impossible to reconcile with what I read elsewhere. I was asked to believe, for instance, that at the very moment the world was wellnigh cut in half by nuclear fission, shepherds and dairy-maids dallied with each other by the Thames, murmuring endearments and chewing shortcake. In the end I had to make a decision and follow it ruthlessly. It was that there was a breed of men who apparently saw no harm in deliberately misleading their readers and completely falsifying facts. These Professional Liars I have utterly and scrupulously excised. One of the worst was surely William Morris, who has left as his memorial a stewpot of mendacity called *News From Nowhere*. Only the title approaches honesty. His motives lie buried with him and the world is the more fortunate. It is impossible to believe a word of this work. It was only after many years of bewilderment and discouragement that I discovered it belonged to a literary *genre* called Pastoral or Utopia, i.e., a book about shepherds or drinkers (topers), as though men had nothing better to do than watch sheep or drink wine! This is a very immoral book and was probably banned soon after publication. It must certainly have been included in the great Burning of 1975, an attempt to eliminate fantasy, duplicity and imagination from literature because of their effect on children.

In the whole of this book there is perhaps one event which may be based on truth. It seems likely that there was a massacre in London at a place called Trafalgar Square. There were massacres nearly everywhere else at some time or other, so I don't see why Trafalgar Square should have escaped. In general, I follow this rule: accept the battles and the peaces will look after themselves. But the confusion of mind and instability of temper I suffered before I finally established the existence of such a wicked convention! And then the picking and choosing, rejecting and eliminating, that were necessary before I could decide what was authentic and what was not. Finding green fields where I knew there should be a waste, smiling faces where only frowns could have existed. But in the

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and I discovered a pretty infallible way of spotting these monstrosities: it hardly ever rains in Utopia!

To follow the death-pangs of liberty it is advisable to look at the United States of America. Jefferson, one of the founders of those States, summarised democracy in the Declaration of Independence as follows: 'We hold these truths to be self-evident, that all men are created equal, that they are endowed by their creator with certain inalienable rights, that among these are Life, Liberty and the Pursuit of Happiness'. When a Jefferson Memorial was opened in Washington in 1943 these words were inscribed on the walls, as was also the opening of the next sentence, 'That to secure these rights, Governments are instituted among Men', but not the conclusion, 'deriving their powers from the consent of the governed. That whenever any form of Government becomes destructive of these ends, it is the Right of the People to alter or abolish it, and to institute new Government'. The major work of the late Twentieth Century was the elimination of general principles from political activity. The Third World War was fought by sleepwalkers. Its highest aim was the control of raw materials, notably coal, iron, petroleum and uranium. But few people were capable even of a vision as lowly as this. The majority of leaders were only concerned with keeping their subjects occupied. They decreed war to keep peace, that is, social peace. The slogan, War is Peace, was actually used by some of the participants. In the past this would have seemed nonsense, but the Twentieth Century had mastered the art of doublethink. The mood of the times was submission to the brute force of events, a choice between evils rather than between positive programmes; a scepticism about basic values and ultimate ends, and a refusal to look too far ahead.

The world was slipping into acquiescence—in fact, most people had already acquiesced. Problems were too big. The only solution seemed to be to pass all responsibility and with it all power to those who thought they were capable of bearing it. It was impossible to think in terms of communities any longer,

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even of nations. Most men were prepared to take a gamble, to see what areas of personal freedom they could salvage from the general surrender. It was hoped that by making a gift of the major freedoms they might be lucky enough to get away with the petty ones. For example, if you gave up the right to criticise your boss he would allow you to get up at whatever time you liked on your day off. If people no longer demanded a free press or freedom of association they might be allowed to sit at home with a pipe and skippers for possibly two evenings a week. The only alternative was to throw all their energies into social and political struggle, and there seemed no point in living just to do that. So most of them gave in.

The last concerted attempt of a minority of ordinary people to take charge of their destinies occurred in the United States somewhere between the Second and Third World Wars. These people were moved by growing economic stagnation. It was not so much the right to speak as the right to work that they claimed. But the old distinction between economic and political motives had disappeared long ago. The Second World War had led to a stimulation of the synthetic chemical industries. At first no one recognised what the inevitable outcome would be. The war disturbed the old trade patterns, and synthetics were only used because the natural product was unobtainable. But once an industry has reached maturity it does not commit suicide willingly. Almost suddenly the American industries realised that they had a choice of raw material, and recently acquired habit and patriotism led most of them to prefer the home product. (The Marxist dogma that people always buy in the cheapest market had been disproved at least a generation before.) There was a sharp surge of economic nationalism: the U.S.A. ceased to import tung oil from China, quebracho from the Argentine, rubber from the Indies, silk from Japan, magnesium from Russia. The other countries naturally retaliated. Now it was the U.S.A. that began to complain of unfair competition. It could not sell its cotton, aluminium or beef because of the success of synthetic substitutes: artificial cotton from coal, wood-pulp plastic instead of aluminium and protein synthetics instead of beef. Then a new

fibre made cheaply from sugar-cane killed cotton almost overnight. While Louisiana prospered, Mississippi, Alabama and Georgia were prostrate. Millions of unemployed Negroes swarmed over the countryside, looking for work. Then came the race-riots. It is probably in these events that we should look for the genesis of the Third World War, which accompanied, rather than caused the rapid transition from sixty-odd self-governing States to three nervous and jealous power-blocs.

The crisis was precipitated by a strike at Shelling, one of the new mushroom towns thrown up by the West Kansas oilfield. The price of oil had dropped by one-third and wages had been slashed to nearly one-half. It was characteristic of the period that workers with a grievance no longer received support from their unions, which had practically become Government departments. Lack of proper organisation led to loss of control and acts of violence. Strike-breakers were brought in from the beef areas of Kansas City, Omaha and Chicago, where unemployment was high as a result of the competition of protein synthetics. In the rioting that followed the strikers used aircraft. The Government was at its wit's end. In the past it had been normal policy to distract attention from internal troubles by resorting to war, but in this case the United States Government chose to incite Mexican and Negro workers to attack each other. Colour-feeling became exacerbated until Whites were attacking Negroes all over the country. The historian of these events, Robert Ardrey,* makes it clear that the Negroes received arms from White sources. It was a calculated attempt to distract attention from the economic situation.

In a very short time the impossible happened: the Government went bankrupt. It is beyond my power to describe the unquestioning faith in American wealth that dominated the early part of this century. America was El Dorado, it would remain a bulwark while the rest of the world collapsed, its flexible economy would be equal to any strain—yet in a few months it was humbled. The Americans had believed they could dispense with world trade at a pinch—yet the synthetics

* In *Worlds Beginning*.

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revolution and the consequent drying up of vast sectors of industrial activity brought them to their knees. They were not even able to pay the interest on their debt. The time-honoured methods of fighting depression, a security programme based on public works and unlimited credit, no longer worked. Credit did not exist. Economic crisis led to political crisis and the election of a new popular Government, which did what popular Governments so often did in their timidity, i.e., chose inflation, which meant supporting property interests against the ordinary propertyless people.

Crises of this nature were no new thing in the Twentieth Century. In fact, it was believed that a certain amount of instability was a necessary corollary of the will-o'-the-wisp, freedom. But nothing of these dimensions had been experienced before. Unthinking prosperity had rotted the American spirit. Beneath the smooth surface, individual initiative had been sapped and personal responsibility corroded. The large-scale capitalism of the U.S.A. had done no more to preserve these qualities than the despised servilities of Communism. People had just stopped caring because individual cares could not register on such a massive social organisation. Personal responsibility had been replaced by dollar responsibility—and the dollar had virtually disappeared. All those ordinary things that had once seemed part of a divine order were now seen to be elusive shadows. The public services deteriorated, needless accidents increased and sexual morality among the young was relaxed. Legalistic restrictions were completely unavailing. Price limitation created a black market. Fines were paid to informers, who flourished.

The last effort of resistance by the traditional forces of individual decency was made at Indian Pass in Texas. An organisation calling itself the Trans-Pecos Chemicals Commonwealth attempted to seal itself off from the prevailing chaos and find a solution based on productive effort and fair reward. Workers were paid in scrip, which gave them a share in the ownership. In a short time the scrip became sounder credit than the U.S. currency because it represented something that everyone knew existed and could be redeemed. The original idea was that of

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the Davis Brothers, a research chemist and an accountant. Ben Davis invented a plastic that would conduct electricity and which was much cheaper than copper to produce. Trans-Pecos entered into competition with the copper corporations. Ownership in the old sense was eliminated. The new system was known as participation, for each worker, from top to bottom, participated in production and therefore ownership. The internal stresses between ownership, management and labour, inherent in the corporation system, were non-existent. Workers received Commonwealth dollars which they could redeem at fixed periods. Redemption was compulsory after five years, which meant that it was impossible for investment to take its toll for ever or for a new class of rentier to arise and smother enterprise. It was impossible to renew rights without putting in more work.

• Every effort was made by Government and traditional commercial interests to destroy this new challenge. Commonwealth appeared to be a way out of the impasse but not a way that could appeal to concentrations of capital. The experiment was ignored by the press. The copper corporations cut prices but Trans-Pecos cut still lower. Counterfeiters introduced forged scrip and the Government announced that the transfer of scrip was illegal. These two measures naturally cancelled each other out. Trans-Pecos was viewed as an attack on the property system and the Department of Justice rendered its opinion that the new system was subversive and planned to overthrow the American form of government. The Postmaster-General declared that Commonwealth advertising was subversive literature and banned it from the mails. Yet nothing could hide the success of the Commonwealth experiment. When the Youngstown Wire and Metal Coy. (Ohio), one of the more unpopular copper producers, went bankrupt, it changed to steel production and adopted Commonwealth methods. Ardrey said of the Commonwealth Revolution that, 'once started, it spread with a kind of slow, irresistible urge, like a barrel of spilled molasses. Ownership was bankrupt and essentially helpless. Ownership's traditional defenders chose, one by one, and for varying human reasons, no longer to defend it'. Clergymen and labour leaders

found a new faith. Political bosses joined the winning side. Editors took the chance to tell the truth for once.

Yet Commonwealth was crushed. Unfortunately we don't know how it was crushed. Ardrey wrote as an enthusiastic partisan and he wrote in the full flush of inevitable victory. But he wrote too soon. Suddenly there is a blank and we hear of him no more. Probably the enemies of participation decided to get him too. There is one hint in Ardrey's book of the probable end. He says that it was widely believed that the only alternatives to the Commonwealth system were a Left revolution (State ownership) or a Right revolution (corporate control). Both had their adherents and at the time it was believed that they were utterly opposed. Perhaps the success of Trans-Pecos sharpened the wits of its enemies and caused them to realise the narrowness of the gap that divided them. The concentration of power in a few hands has the same effects, whether the hands be those of the State or of monopolists. In the latter case the monopolists control the State and later become the State. That is why I believe the Third World War began as a joint enterprise of the great power interests designed against the remnants of individualism, the final gesture of personal responsibility of small-scale initiative. It explains the comparative mildness and dilatoriness of the war for once 'capitalists' and 'Communists' had united there was no hope for any opposition. Communist terminology and ideology were adopted because they were in the ascendant. Awareness had not yet reached the stage where the managers could dispense with the familiar notion of rival sovereignties—these lingered on for some time yet. But the day of the nation-state was over and that of the power-bloc had arrived.

• It would be tedious to follow the political details of the transition. They were extremely varied, for if there is one certainty about political conduct it is that it normally masks social reality. The subsequent union (or perhaps federation, it is not clear which was adopted) of the United States of America and Great Britain, for instance, was the domination of a lesser by a greater finance economy. But politically it appeared to be a mixture of sentimentality and traditional diplomacy. While the

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crisis of the Twentieth Century dragged on and atomic war (mostly fought with great prudence over N.E. Asia, the North Pole and Northern Canada) flickered on and off, Great Britain was still making an effort to accommodate her traditional ways with the world in the making. Superficially she had remained a plutocracy with a king which she wore like a feather in her cap. But beneath the surface the stresses and strains of constant war had produced a social and political structure very similar to those in the other leading countries. It was becoming increasingly obvious that sooner or later Britain would have to come into the open like the other great powers—an effort which, as the French were well aware, would be repugnant to all that the British held dear. There was no hope for democracy but the British could not be expected to admit this. On the other hand, they would be perfectly satisfied if they were able to pretend that democracy persisted. They were constitutionally incapable of announcing brutally that the money power was also the political power, as the Americans were already proclaiming from the housetops, having proclaimed the opposite from the same housetops for nearly a couple of centuries previously.

I have told you enough about the British character for you to understand that it was essential for the problem to be tackled obliquely. Since there was certain to be a dictatorship King Magnus decided to assume it himself. He did it by reviving the almost forgotten power of royal veto. Democracy was not only dead, even the shams were dying. At the last election (a few years prior to 1970) only seven per cent of the electorate had voted, and they were Party hacks and hangers-on, playing the game to the bitter end. There were still sufficient colonies left for exploitation to ensure prosperity, which continued to lull the people into complacent dreams of security. But the prosperity was not only false, it was ill-founded, depending largely on luxury-production—sweets, sports equipment, art and racing cars. All profitable production was in the hands of large private syndicates, quite untouched by anything as the American Commonwealth movement. British industry was proud, and American capital envious, of such an

apparently rock-like economy. On the other hand the British Government and Party leaders took a hint from Russia in persuading the workers that 'real' power (something almost mystical and extremely satisfying) belonged to the Proletariat. The syndicates were already mostly in American hands. One of the most notorious was Breakages Ltd., which performed all repairs of industrial equipment throughout the country. All inventions aimed at the reduction of breakages, particularly of glass and steel, were bought up and buried. If any politician dared to criticise the company's policy he was subjected to such a barrage of criticism in the press he was always removed from office. (The Will of the People.) Perhaps it was no accident that the Home Secretary's brother-in-law was one of the directors. The pattern was familiar, and could be effected without any of the upheavals that were first necessary in the U.S.S.R. and without any of the opposition aroused in the still partly individualistic U.S.A. Industry and a Total Party united in the name of the People.

While in the coils of Twentieth Century economic and political developments one is tempted to forget Herodotus, but he is brought back to our notice by the historian Bernard Shaw, who informs us that behind the schemes of King Magnus lay his mistress Orinthia.* Not even the enormous forces of capital and labour can quite erase her nervous beauty and quick intelligence. Yet it is doubtful if Orinthia were more than a rather charming pawn. In the midst of Magnus's scheming to do quietly what Hitler and Stalin had done bloodthirstily comes the merger of the U.S.A. and the British Commonwealth. British *amour propre* would not allow the weaker partner to take the initial step. The honest brokers were O'Rafferty, President of Eire (a pig-and-cream republic), and Bossfield, President of the United States, himself. The Americans had few political inhibitions when power was at stake. The merger formed a double purpose: American capital increased its hold over British capital, and America acquired an advance base against the growing challenge of Russia. In a very short time the new combination came to be referred to as Oceania, and the

* In *The Apple Cart*.

U.S.S.R. and her subordinates as Eurasia. Britain, still dreaming of past greatness and immunity, became Airstrip Number One. The immense danger of her position becomes apparent when we consider that Germany had also become a Soviet Republic within the Eurasian bloc and that France, after characteristic hedging, did the same later. But France had become so weak that the mainland had been virtually abandoned and the Government migrated to New Timgad on the North African coast. The Americans were conscientiously buying up and transporting all the movable items of English culture (paintings, manuscripts, castles, cricket pitches) and Britain was becoming a barracks controlled by technicians, airmen and money. At the other end of the world a third bloc was forming in the name of Eastasia.

• It is astonishing to us, looking back, that these things could be done without their real significance being recognised. The British press continued to carry lofty articles on the continuance of tradition and in the House of Commons orators never ceased to invoke the values of the past, which they imagined to be still living, remarkably robust and only slightly camouflaged. Magnus was one of the few who was not blinded by the rhetoric and wishful thinking. 'England will be just a reservation', is one of his recorded sayings. Boanerges, President of the Board of Trade, who imagined he was the king's most redoubtable opponent, actually assisted him to power. Boanerges was a great admirer of the Russian system and was the first British politician who habitually wore a uniform—first a Russian peasant blouse (long after it had gone out of fashion in Russia), then the more familiar military-type uniform. It is possible that he is the man who effected the change to the Oceanic system, though in my opinion he was too stupid to initiate anything so consonant with reality. We know, however, that, with his attention constantly focused on the East, he advocated a Republic under a 'Strong Man.' Under the very nose of Boanerges Magnus filled the role and Britain finally turned from the East to a fond Western embrace. Not even Magnus was clever enough to resist that.

During these years something was happening to the American

mind which not even the immense enthusiasm for the idea of a World State which flared up during the 1970s was strong enough to counteract. Although the differences between American and Russian, Oceanic and Eurasian, political and economic ideas were growing progressively less, the emotional attitudes of the American people were still rooted in the past. 'Communism' was still the enemy, although it was often difficult to know where the dividing line between Communism and corporatism actually lay. The Americans were becoming grimmer. It was their response to responsibility. The pioneering adventurousness of the past was dead. America felt embattled and searched feverishly in corners for 'the enemy'. The new approach to a new situation took a kind of puritanical form. A true American was held to be one who took his pleasures sadly. Even the prim complacency of a servile Britain was more hopeful than this. Anyone who possessed even the vestiges of what was called the artistic temperament was immediately suspect. Artists, poets, those who used the imagination, were regarded as irresponsibles, men who would willingly sell their birthright for a strip cartoon. Not only was their moral fibre weak but they were just the people who might be expected to succumb to sinister Communist blandishments. A man who would dabble in the 'beautiful thoughts' of poetry would also be attracted by the 'high ideals' of Communism—not that these ideals were admitted as 'high', of course, but they could trap the unwary. As early as the 50s and 60s the humbler expressions of imagination, cartoons, detective stories, feature films, had been controlled and in many cases eliminated. American 'science' was opposed to Soviet 'fantasy'. Even the very word 'politics' became a synonym for 'Communism'. The truth was so obvious that only a decadent or a subversive would bother his head to question it. The movement reached its peak in the year 1975 when all works of art, fantasy, imagination, 'escape' and speculation were destroyed. Mass fear took control and only 'pure' material received a licence for publication. Congress struggled with definitions and finally surrendered to blanket legislation. But the settlement of Mars, to which I will refer in detail in a later chapter, provided a refuge equivalent to that

found by the Seventeenth Century Puritans in America. By 2005 those who found the intellectual climate impossibly restrictive, and who could afford it, were escaping to Mars. But it was not long before they were followed by the Inspector of Moral Climates.

Yet there were still forces in Europe that resisted the annihilation of freedom. America had produced the Commonwealth partnership scheme. Europe had no part in it but now, as a last despairing effort, the traditional centres of freedom made an attempt to force men into sanity. Throughout the Twentieth Century writers and thinkers had been urging the establishment of a World State. It was pointed out that national sovereignty was really only an extension of ancient tribalism, and that a world that had shrunk temporarily and spatially, thanks to radio and jet propulsion, could no longer be administered on the basis of jealously guarded and chauvinistically motivated parishes. In its own way, stumbling and haphazardly, the human race was moving towards political unity but it was not yet mature enough to do it in one step. The power-bloc lay between the nation-state and the World State. A few visionaries demanded a jump, for which they presumably were prepared but for which the majority of plodding citizens, State-worshippers, ideological fanatics and pulp-targets were not. Yet the visionaries came very near to success, thanks to the timely discovery and rapid utilisation of atomic power. The World State was destined not to come for yet another three hundred years, but the Twentieth Century had a glimpse of its embryo.

Atomic energy brought about a revolution in industry and transport comparable to, and eventually greater than, that effected by the harnessing of electricity. It was first discovered in the 1940s and was characteristically first used in warfare. During the fifties interest was largely focused on its military value but with the easing of political tension during the early sixties it led to an outburst of feverish enterprise, vast productivity with correspondingly enormous opportunities for the rich, i.e., monopolists in the West and bureaucrats in the East. But beneath the industrial ferment lay social disaster. An economy already weakened by the onslaught of synthetics was

now expected to adjust itself to the sudden introduction of an inexhaustible and eventually cheap source of power. The coal mines were doomed, oil was becoming unsaleable, miners, steelworkers, skilled and unskilled labourers were thrown out of work. In this we probably see the causes of the strikes referred to in Orwell's *Nineteen Eighty-Four*, strikes which assisted the organisation of highly disciplined monolithic parties which finally gained power all over the world on a wave of proletarian fervour. A fall in the cost of transport destroyed the high land values obtaining in every centre of population, gold (itself a by-product) was depreciating. One of the most reliable social barometric signs in the Twentieth Century was the suicide rate in North America. This quadrupled and there was an increase in violent crime.

Once again our source for these events is Wells, in a volume quaintly entitled *The World Set Free*. The world glimpsed freedom for a fraction of time, but the freedom never set. It was rapidly dispersed by the advancing powers of monopoly and social discipline. Wells himself quotes from an autobiography that has unfortunately not survived, *Frederick Barnet's Wanderjahre* (published circa 1970). Barnet was an observer of detail, rather than of the general tendencies of the times. Amid the almost irrevocably entangled webs of this war he chronicled the condition of the ordinary man. For instance, we are given this picture of the Great March of the Unemployed through the West End of London.

They were a dingy, shabby, ineffective-looking multitude, for the most part incapable of any but obsolete and superseded types of labour. They bore a few banners with the time-honoured inscription: Work not Charity, but, otherwise their ranks were unadorned.

They were not singing, they were not even talking, there was nothing truculent nor aggressive in their bearing, they had no definite objective, they were just marching and showing themselves in the more prosperous parts of London. They were a sample of that great mass of unskilled cheap labour which the new still cheaper mechanical powers had superseded for evermore. They were being 'scrapped'—as horses had been 'scrapped'.

These poor wretches, heirs of Shakespeare and Blake, Burke

* FREEDOM VERSUS TYRANNY

and Gladstone, still believing themselves the aristocrats of labour, did not know what was happening. Their king had increased, or was about to increase, the size of his dominions by the stroke of a pen—a financier's Biro, it is said. They believed fiercely that the Western alliance would ensure them their necessities, beer, tobacco and Betty Grable.* An Eastern alliance, they were told, would deny them all these things. Their strongest ally might have been carefully controlled atomic power, but they could not see how the force which had initially deprived them of work could be anything but hostile. Intellectual timidity and a lack of mental flexibility were the true enemies of these men.

Wells follows his usual practice of antedating these events. It is difficult for me to feel charitable towards him—is not my task great enough without the addition of such dyspeptic trivia? But the main lines of this conflict are discernible although their true significance is often veiled. The Third World War was midwife to the power-bloc system, with the World Staters acting as guerrillas. It dragged on for about twenty years, for most of its duration it was not fought with any great severity, and the period contained many truces. There was a continuous assembling and reassembling, first of the nations, then of the federations. Its opening phase was the fiercest and included the dropping of small atom bombs on Paris and Berlin and the destruction of the Dutch dykes. The war began as an old-fashioned struggle for national supremacy and ended as a means of enslaving vast populations. First of all France fought Germany, as though it were 1870 or 1914 all over again; in the middle period arose the Central European and Slavonic Federations, accidental agglomerations enforced by military circumstances; in the closing stages the three great super-states faced each other, pretending to glower for the edification of the masses, but in reality agreeing to the partition of Terra. Wells called it the Last War. By this he obviously meant the last outbreak of violence on a large scale that was recognisable as 'war', in the old definition of the term. The Fourth World 'War' was simply scientific destruction.

* A minor but popular deity in the Twentieth Century sub-Christian pantheon.

Yet in the midst of this chaos came the attempt to establish the Republic of Mankind. It was the last gesture of the spirit of Tom Paine, Rousseau, Louis Blanc and Harold Laski. The leading spirits were the French ambassador to Washington, Leblanc (national embassies were retained for some years after the nations had been partially swallowed by federations), and the successor to King Magnus. This king, a Merovingian, and, enjoying the Merovingian name of Egbert, was styled King of Oceania, and was the last of an ancient line. As one watches him earnestly striving to bring the new republic into existence one is aware of the manipulators behind him, men of iron and oil and gold and especially, atomic power, watching him with a kind of admiring fascination. There must have been a stupendous fund of moral fervour in this man, that he should have been allowed to bring his schemes so near to fruition. Men who still retained the power of independent thought flocked to his assistance, led on by the magnificent dream of world peace—although it is likely that some were attracted by the hope of world power and only withdrew when they realised that Egbert's schemes left little room for their personal machinations. All over the world men rose to acclaim the new ideas and for a while the warring Governments were brought to a halt. The first to resist were the 'patriots' of Japan, now the controlling force of the evolving Eastasian Empire. But the most formidable enemy of the new movement in its early stages was Ferdinand Charles, King of the Balkans (known to contemporaries as the Slavonic Fox). The most effective adherents of the World State were to be found in Western Europe, in the cradle of what was called the European tradition. North America looked on moodily, a little worried by the involvement of their new 'king' though aware that it lay in their power to break him if he became too independent. Russia waited. The Russians were about to snap up the rich prize that lay to the West, the Slavonic Federation and later the Germanic Federation. We can see the hand of Russia in what followed.

The World Staters had set up their own government at Brissago in Italy. We are not to understand the word 'government' here in its accepted sense. It corresponded fairly closely

to the government of the earlier League of Nations at Geneva and of the United Nations at New York. But there was a difference, a difference in quality. Brissago was determined. Brissago could call on power groups and even States which would be prepared to defend its ideals. Brissago would do wholeheartedly what U.N.O. had done half-heartedly and Geneva had never done at all. And Brissago actually controlled atomic plants. What had at first seemed to be another pious scheme of world betterment suddenly appeared to be a genuine reality when Ferdinand Charles announced that he was prepared to support the new 'World' Republic. All that was necessary was the discussion of terms. Ferdinand Charles, assisted by his Prime Minister Pestovitch, was probably a Communist dictator who had established hegemony over the whole Balkan area and then succumbed to dreams of Empire, a familiar failing among Communist rulers of this period. The official terminology of his régime made it easy for him to simulate enthusiasm for an international State. His actual plan was quite simple: to blow up the Council of the Republic while it was in session. The plot was discovered, Ferdinand and his Minister were shot. The Russians deemed this a suitable moment to extend the blessings of their overwhelming desire for Peace to their Slavonic brethren, which they did with tanks.

Meanwhile, war was continuing in a desultory fashion—probably *pour encourager les autres*. France, getting feebler and feebler, with its Government in New Timgad and Paris in ruins, was no longer able to support the British Army which had (traditionally) gone to her assistance. But in England conditions were, if possible, even worse. An atom bomb had been dropped on East London (it was a familiar misconception among the un-British section of the human race that they only had to drop bombs on the English working class and they would rise in revolution—in fact, nothing united them more firmly to their masters than a little indiscriminate slaughter). The overseas food supply had been cut off. Barnett tells us how the troops were given bread, dried fish and boiled nettles on their arrival at Dover, after the retreat through France. He saw four men hanging from telegraph posts for

stealing sweeties. Clay and sawdust were mixed into the bread supplied at refugee camps.

The Republicans really believed that capitalism was smashed. It was not the first time that this delusion had gained ground. The capitalist system, in fact, was one of the toughest forces in the later Middle Ages. Its doom was constantly being forecast and never being realised. It is doubtful if capitalism ever really surrendered. It is truer to say that it made a compact with rival forms of enterprise and lived the latter part of its life in a series of disguises. Theoretically, limitless gold and energy should have eliminated the need, desire or possibility of profit. Psychologically men are much too stubborn to accept natural facts. Wells said the efforts of the monopolists and bureaucrats to shore up the crumbling capitalist (corporate or State) edifice failed. Half of the industrial classes had been out of work before the war and it had been necessary for the various Governments to provide housing, food and clothing without any return in labour whatever, unless military service is accounted labour. In those areas where the Republic enjoyed an evanescent triumph these men were now employed in public works, crafts and the use of the new atomic machinery. The Council made a pronouncement:

There can be no real social stability or any general human happiness while large areas of the world and large classes of people are in a phase of civilisation different from the prevailing mass. It is impossible now to have great blocks of population misunderstanding the generally accepted social purpose or at an economic disadvantage to the rest.

The World Republic system was perhaps a magnificent dream, which sought to realise the amalgamated individual dreams of a thousand social prophets. Here and there attempts were made to put it into practice but in general it never passed beyond the blue-print stage. Wells wanted to believe that such a society had once existed and exaggerated its successes. The evolving power-blocs, American, Russian and Sino-Japanese in their inception, watched jealously and struck the new society down when it gave signs of buoyancy. A few cultivating guilds were substituted for the individual cultivator or the State-

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controlled collective farm. Their organisation was democratic but they were large enough to supply the necessary labour. The workers were supposed to live in towns, only maintaining watchers' bungalows on the ground cultivated. This measure was expected to eliminate the old boorish country life of the past, but it is doubtful if it ever came to fruition. Simplified English was to be adopted as a universal language; gold was to be replaced by units of energy in a universal monetary system; the World Council was to be thought of as a mere presiding body over expert committees which made or altered regulations as it saw fit.

• But it was not to be. It is doubtful if even the few units that were set in motion managed to maintain themselves for more than a few years, or in many cases even months. Like all other attempted revolutions it could not succeed first time. Christianity, the Renaissance, the French and Russian Revolutions, failed repeatedly before their principles were finally adopted. At first the opposition appears to collapse completely, but it is always more deeply entrenched than had at first seemed likely. Nationalism was on the way out, but egoism, chauvinism and the social habits of five hundred years, reinforced by wonderfully efficient methods of propaganda, could not be eradicated at one blow. King Egbert, Leblanc and their associates were the martyrs that every new movement requires. We do not know their fate, but it was probably not a pleasant one. We do know that the ancient English monarchy disappears from history after Egbert. The finance corporations moved in, the 'proletarian' parties at their right hand, to disembarass themselves of such a nuisance. The World Staters gave way before the power-blocs, just as in the Fourteenth Century the power-bloc, in the guise of a united Christendom, had fallen before the 'nationalists'. Perhaps the 'Martial' invasion had acted as a stimulus on the more sensitive minds, but most minds were still blinded by greed and tradition. Earth was still a tempting prize.

Out of this confused period comes one certainty: the domination of the three super-states. Oceania, centred on the Americas,

controlling the southern half of Africa, Australia and New Zealand, with outposts in Iceland and Britain; Eurasia, centred on Russia, master of Europe, the northern half of Africa and the Near East; and Eastasia, centred on China and Japan, extending southward to Indonesia and Malaya, westward to Burma and India. Each professed a form of collective ownership and control that was barely distinguishable from the others. The Oceanic brand was called Ingsoc, a corruption of English Socialism. But this English Socialism owed far more to Russian Stalinism than to the tenets of Owen, Morris and Attlee. In each State there was one Party. Within the Party there were Inner and Outer Circles, the greater and the lesser. The Inner Circle was the ideological Praetorian Guard of the leader (Big Brother in Oceania, a Bonapartes-like figure but more intelligent); the Outer Circle was the servile, indoctrinated mass of petty officials who sacrificed their talents to the maintenance of the ruling oligarchy. Beyond was the proletariat, in whose name everything was done, who enjoyed beer, cinema and slogans and had been relieved of the troublesome necessity of thought. The Inner Circle was an amalgamation of old-time monopolist and State bureaucrat.

I do not intend to spend much time describing this system, partly because it was so short-lived (it destroyed itself by its own idiocy in less than thirty years), partly because it has been admirably described by George Orwell in *Nineteen Eighty-Four*, a book which my scribes are at this moment copying in vast numbers that it may be a warning to the race. The three States made war on each other continually, calculatingly and half-heartedly—a strange combination of attitudes, perhaps, but one which arose naturally from the circumstances of the time. In the past men had longed for plenty so that those who had not should no longer feel any compulsion to plunder those who had. Now that plenty was attainable the power-lust of the few perceived that its realisation would make nonsense of power itself. It was necessary to maintain a steady flow of destruction for the avoidance of plenty, so that men would remain convinced of Nature's intrinsic hostility, and would continue to accept the dictum that life was essentially nasty, brutish and

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short. The World State had seemed a dream to many, but to a few it had become a nightmare. The principles of rational thought and behaviour that had struggled into existence during the preceding three centuries were now conscientiously warped so that irrationality should parade as reason. Education and propaganda manipulated the human mind to an acceptance of doublethink, a thought process that allowed a double interpretation to every statement but left no doubt as to which was the desirable one for social purposes at any given moment. The method is best expressed in the three chief slogans of Oceania: War is Peace, Freedom is Slavery, and Ignorance is Strength. It was possible to believe these dicta and at the same time know that they were lies. The skill lay in knowing exactly when to apply each judgment.

To keep such a society stable it was necessary to posit a deadly enemy. The Russian Communists had been the first to use this method consciously, when they selected Trotsky as the author of all evil, although the early Christians had approached the same idea by their establishment of Satan as an almost autonomous god. In Oceania all setbacks were attributed to the machinations of Emmanuel Goldstein,* who may or may not have existed, and who may or may not have been the author of *The Theory and Practice of Oligarchical Collectivism*. In any case, the book itself existed and was by far the ablest critique (probably the only critique) of the power-bloc system. Although it has not survived Orwell fortunately quotes from it at length. The main function of the book was to entrap those whose powers of doublethink were imperfect, and in whom the critical faculty had not been deadened. Such people easily fell a prey to the Thought Police, who subjected their victims to both physical and mental torture. The power to torture others was the ultimate power sought by these rulers, especially as the opportunity for torture had a comparative scarcity value now that technical advances had widened the scope of most other opportunities.

* It is interesting to note that the Social Enemy was usually a Jew. Indeed, Satan was probably Jewish, and this tempts me to find the origin of this practice in the dominance of Christian culture, even after the decay of Christianity, for the Jews were enemies of the True God and therefore of Man, His servant.

Meanwhile the armies of the three super-states battled on aimlessly in a rough quadrilateral formed by Tangier, Brazzaville, Darwin and Hong Kong, encompassing sufficient destruction to keep the war and maintenance industries employed, but never sufficient to permanently weaken any of the combatants.

Read any book of history, of any period, and you will find that every era has been a transitional one. All we can say is that some periods have been more transitional than others. The Third World War witnessed the change from one political type of organisation to another, with the glimpses of a third showing through the carnage. It must be remembered that while Britain, for instance, was apparently in the grip of a ruthless oligarchy, there were still the occasional twitchings of an earlier political system. In 1984, the very year selected by Orwell for his study, and in the years following, an effort was made to restore personal rule with all its trappings of free expression and spontaneous loyalty. The Notting Hill episode was an anachronism, a final hopeless upthrust of the old forces of feudalism and mediævalism which had miraculously persisted through the intervening centuries. The old capitalist elements had been absorbed and no longer wished even to provide an opposition. But the feudal elements could not be absorbed by a society so alien, they had to be annihilated. First of all they made their ridiculous bid for power. It is unwise to use bows and arrows against tanks but you'll always find fools to do it if you can bewitch them first. An astonished Government seemed to have been mesmerised by this apparition from the past. It must have provided a little light relief in a grim age.

Once again, as with Wells, we must tread warily. The author of *The Napoleon of Notting Hill*, K. G. Chesterton, was certainly a partisan of this movement, and was almost certainly carried away by the glory of such a pinchbeck renaissance. We need not believe the half of what he tells us, but it seems likely that a gang of desperadoes, grocers and antique dealers did barricade themselves in Notting Hill and defy all comers. We learn from this work that some of the small nation-states of the past had only recently been absorbed into the super-states. For example, the President of Nicaragua was at this time in London, a

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political refugee from the past, and seems to have been tolerated by an all-powerful Government. He was perhaps the only independent the Government did tolerate. His position was analogous to the jester in a mediæval court.

The leader of the movement was a practical joker named Auberon Quin, who adopted the grandiloquent title of king. Chesterton would have us believe that he possessed more power, and popular support than he could possibly have had. He also pretended that the movement lasted much longer than it did. Our historian's notions were as garish as the banners and heraldry he loved to describe.* The new movement would not have made even a ripple on the course of events had it not been taken seriously by a madman named Adam Wayne, self-styled Provost of Notting Hill. The affair is represented as a campaign for a principle and it led to a skirmish in the Notting Hill area, but it is my belief that it was no more than a popular riot, possibly in protest against a new tax on beer. There is evidence of demonic possession or advanced pathological states in some of the leading actors, that is all. A sordid little affair, scarcely worth the attention of a serious historian.

* For sheer mendacity I would rank Chesterton second only to William Morris.

The Challenge from the Deep^s

I HAVE ALREADY dealt with the first challenge to man's supremacy on Earth. Owing to its concentration on one corner of one small island, and also to the relative unpopularity of the British (later intensified by the British claim to a victory achieved by microbes), this event did not arouse the racial solidarity that might have been expected. The next challenge was far more serious because more widespread and more efficiently planned.

Exactly when the sea-tanks first appeared is open to conjecture. It seems probable that it occurred some time between the end of the Third and the beginning of the Fourth World Wars. Wyndham, our only source,* refers to various parts of the world's land surface by their traditional names, but these are no longer of significance. If an independent Spanish Government, let us say, no longer existed, Spain itself was still there, it was still called Spain, and it had a local administration subject to Eurasian hegemony. Wyndham's terminology is frequently old-fashioned, but there is nothing surprising in this when we consider the speed at which events moved in the Twentieth Century. A man born a subject of Mussolini, the Italian nationalist dictator, in 1930 might have seen his country become a republic after the Second World War, become infected with the World State idea during the Third, become part of the Eurasian power-bloc a few years later, make an abortive return to nationalism in the closing years of the century, and finally he might have witnessed the short but catastrophic upheaval of the year 2005. In the meantime

* *The Kraken Wakes*, by John Wyndham.

he might have visited Mars. It would be excusable if such a man spoke of Italy as a political unit, so confusing must the passage of events have been. Wyndham writes consistently of political units which he calls Russia, the United States of America, Britain. This is a tribute to the deep impression that these ancient political and cultural centres had made on the mind of men. The Oceanic Navy was divided among several stations, but to Wyndham they are American, British and so forth. These names may have been actually retained in order to strengthen loyalties by an appeal to tradition where this did not endanger the State. But it should not be forgotten that Britain was always referred to in Oceanic Councils as Airstrip One.

Wyndham was himself a First Airstripper, and his information is tainted by Oceanic attitudes. We learn that when the new phenomena were first noticed they were widely attributed to 'Russian' (i.e., Eurasian) espionage. Red 'fireballs', reminiscent of the Flying Saucers of an earlier date, were seen flying at speeds of up to 1,500 m.p.h. (the equivalent of 2,500 k.p.h. and considered very fast). They fell into deep-water areas of the ocean, and the fields of concentration were south-east of Cuba, 1,000 kilometres south of the Cocos Islands, off the Philippines, Japan and the Aleutians. When struck by artillery they exploded in big white puffs. The 'British' and 'U.S.' Navies sent globes down to examine conditions but they were all lost. What first caused serious alarm was the discovery that the metal cables appeared to have been fused. Then two American naval vessels were destroyed by electric charges. This was followed by the disappearance of other vessels, not all of them engaged on deep-sea exploration. An atom bomb was dropped off the Marianas without any noticeable result except dead fish.

The first person to devise a theory accounting for these events was a First Airstrip scientist named Bocker. (This name is significant, for the professional wear of the early scientist was tweed knickerbocker and shooting jacket, if Wells is to be trusted, which is doubtful.) Bocker was a geographer who published the startling theory in the popular press that there was intelligence in the Deeps, but that it probably derived from

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another planet (he suggested Jupiter, whose inhabitants would be accustomed to extreme pressures). By means of this theory he connected the sinkings with the fireballs and also countered the objection that deep-sea conditions would not support intelligence. He advised sympathetic communication. Other scientists ridiculed these ideas and public feeling in general was hostile because it was convenient to attribute the phenomena to a Eurasian plot. The Eurasians in turn believed the reports were 'capitalist' tales to divert suspicion from Oceanic activities which would not bear scrutiny.*

Bocker was not to be put off, however. He believed the alien creatures were mining metals in the Mindanao Deep and in the Deep south-east of the Cocos-Keeling Basin. Another hypothesis was that they were clearing a trench between the eastern and western Atlantic Basins and digging a tunnel beneath Guatemala (corresponding to the Panama Canal). He was encouraged in this speculation by the discovery of large deposits of ooze found floating in the Kuro Siwo current, in the Monsoon Drifts off Guatemala and in the Mosquito Current on the other side of the isthmus, and by the thickening of the water in mid-Atlantic and in the West Australian Current.

The sinking of naval and passenger vessels, always over one of the Deeps, continued. An Oceanic task-force of vessels was sent to bomb the Cayman Trench with H.E.† and atomic bombs, but two of them sank without warning. This led to an International Naval Conference in London, which was even attended by a Eurasian delegation, although it withdrew when the pooling of scientific resources was suggested. The First Airstrippers were especially alarmed because they were dependent on overseas trade for their food; and their leading delegate quoted a poet named Kipling to underline their plight. It was announced that vessels were being destroyed in two ways: sympathetic vibrations of such intensity were set up that the

* Although there was no essential difference between the Oceanic and Eurasian systems, the latter still used the term 'capitalist' in derogation of their rivals.

† I have been constantly bewildered by initials H.E. in one context was an abbreviation of His Excellency. In this case, it probably denotes hydro-electric. I understand that electricity was frequently made from water, though the process is now lost to us.

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craft shook to pieces in a minute or two; or there was an attack on the hull below the waterline, the vessel being sliced rather than holed. The main result of the Conference was that shipping was advised to avoid the Deeps and certain precautionary measures were taken and for a time appeared to be successful. But after an interval of some weeks the sinkings started again. Matters now began to take a more serious turn. Saphire Island, previously a Brazilian possession in the Atlantic, was mysteriously attacked. The still primitive population of a hundred or so almost entirely disappeared, with their flocks—the bodies of only four women and six children were discovered. Next it was the turn of April Island, south of Sunda Strait, and again the majority of the inhabitants were removed. This time there were a few survivors, who spoke of an attack by 'whales' or 'giant jelly-fish'. Further raids were made in the Grand Cayman, certain Pacific islands and one on the Azores. A thousand people were removed from Port Anne on Gallows Island in the Bahamas, the survivors reporting 'tanks'. A similar assault was made on the Kurils. The 'tanks' ejected cilia which were covered with a strong adhesive capable of carrying off adult men and women.

It will be recalled that the 'Martian' attack caused a crisis in religious faith. The same thing was happening again as it became evident that man was not necessarily the star of creation. Religious faith was in any case wearing pretty thin, thanks to the broadsides of science. As usual, there was a considerable time-lag between the scientists themselves and the general public. The understanding of the atomic structure of the universe, the extension of astronomical knowledge and new discoveries in the field of paranormal activities were leading scientists back to a more tolerant attitude towards the existence of God, but the average man and woman tended to be unduly fascinated by human technological ingenuity. Bocker himself possessed a lively intelligence but not a profound one and was far more representative of the unspecialised man than of the physicist. He did not believe in God. If he had believed, he said, he would have been frightened because he would have been superstitious—but he was not superstitious, being perfectly convinced.

that there was a rational explanation of the recent disasters. He was reported by a popular broadcaster as having said that if he believed in God

... I should be tempted to think that God proposed to teach me a lesson. That He was saying: 'H'm. You think you're so clever. Little gods yourselves, with all your atom-splitting and microbe-conquering. You think you rule the world and possibly heaven too. Very well, you conceited little mites, there's a lot about Nature and life that you don't know'.

I shall have occasion in later chapters to discuss the change in religious attitude that took place during this and the subsequent centuries. All I propose to say here is that faith in God tended to dwindle when God revealed others of His creatures that could challenge man in his own proud field of intelligence: The reaction was to a large extent vindictive, punishing God for His deceit by withdrawing loyalty. According to St Augustine God must have had foreknowledge of this decline in allegiance. Possibly the sea-tanks were a special creation for the chastisement of mankind.

The tanks were popularly called 'bathies', an abbreviation of bathysphere. Bocker believed that the cilia were artificial, organic constructions, built for a specialised purpose, and under remote control. The attacks increased in scale; they were particularly heavy on the coasts of Japan and the West Indies, where the population retreated inland, and there was widespread panic in the Philippines and Indonesia. Bocker urged the arming of the people for their own self-defence, but no Government would agree to this and Bocker was subjected to heavy criticism by the controlled press. It was becoming clear that the Governments were cynically balancing the number of lives the people would agree to sacrifice without becoming dangerous, against the security of the administration. The security of the people did not matter. In this period a bureaucrat was a First Class Citizen. The rest travelled Second or Third.

The attacks now reached a new peak of destructiveness. One made on the Oviedo-Santander district in Spain resulted in the loss of 3,200 lives, at a conservative estimate. Similar raids had

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been made on the coasts of Guatemala, Salvador, Chile, Western Australia, East and West Indies, the invaders sometimes using as many as fifty or sixty tanks. In addition to carrying off people they were now destroying buildings simply by pulling down the lower storey. Santander was the first place where they were bombed from the air. This was highly successful as only four or five tanks got back to deep water. But soon after they retaliated by an attack on Gijon with anything between fifty and one hundred and fifty tanks. (Estimates varied.) They next turned their attention to Ireland, making raids on Buncarragh in Donegal and also in Galway Bay. Minefields were laid along the west and south coasts of Ireland, south-west England and the west coast of Scotland. Ullapool became a huge Anti-Bathy Centre, with weekend camps, summer schools, training courses and diplomas in Bathy-Sinking. The enemy were now suffering serious losses everywhere. Quite suddenly the attacks ceased and after a period of caution the state of emergency was called off.

But it was only a change of tactics. It was noticed that areas of dense fog were increasing in northern and southern waters and that the number of icebergs in both the Arctic and the Antarctic was much greater than normal. When the sea-level began unquestionably to rise and low-lying land was flooded, there was no longer any doubt of the enemy's activity: the polar caps were being melted! Bocker believed that hot water was being projected into the polar regions, in conjunction with an atomic reaction pile.

Florida was swamped, and part of Texas disappeared under the water. Louisiana and the Mississippi Delta suffered badly. The Rhine and the Maas flooded, Holland was lost to view. The North German Plain became a lake as the waters of the Ems and Weser were forced above their banks. The inhabitants of the Ardennes and Westphalia organised resistance groups to fight off the refugees. The East Anglians (a British tribe) retreated to the Midlands. Barricades were set up in the streets, there were looting and shooting. The First Airstrip administration once again moved, this time to Harrogate. There were floods in Karelia and south of the White Sea, and the overflow,

from the Gulf of Ob formed a huge inland sea. At its highest peak the water rose 100 feet (approx. 30 metres), then stopped. Highland areas formed themselves into separate communities, independent and defending themselves from attack. Wyndham claimed that the population dropped to between one-fifth and one-eighth of what it had been, but in my view this is an exaggeration. It is true that more people probably lost their lives as a result of disease, due to lack of food and low resistance, than by drowning. There was also a considerable fall in temperature, the sea actually freezing around the shores.

This was by far the greatest shock that the human race had yet sustained—or at least since the days when the Atlantic Ocean broke through the Pillars of Hercules and flooded the lowlands between Europe and Africa. But men were by now extremely flexible and possessed great technical ingenuity. It was still within their powers to ward off such an elusive enemy. They had received a grave setback but so long as their scientists were safe they were able to hit back. It was the Eastasian Japanese who first discovered the effective way of dealing with the bathies: ultrasonic waves killed them. Once this was discovered and the waves were beamed throughout the Deeps, the war was over. The bathies could devise no protection. In a short time it was as though they had never set out on their campaign of conquest. Men did not even have the satisfaction of examining the creature that had nearly destroyed them. When they died they floated to the surface, where there was no pressure to hold them together. All that was to be seen was a lot of jelly which stank in the sunlight.

But it was a warning. Unlike the 'Martian' invasion, it affected the whole human race and it had very nearly succeeded. The Japanese (like the British before them) acclaimed themselves World-Saviours; and offered sacrifices to their own Big Brother, whom they called the Son of Heaven. But the disaster had been too big for anyone to take sectarian or racial claims seriously. It was realised for the first time that the human race might have greater enemies than themselves. This certainly accounted for the more sober political behaviour of men during the last decade of the Twentieth Century, and for a

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recrudescence of the World State idea. Friedrich Meinecke, a German historian, had claimed that in the Eighteenth Century the average sophisticated man was a citizen of the world, regarding the State as a mere convenience. This attitude had been transformed by romantic writers, who turned a simple national consciousness into a demand for a national state. We have seen the national state pass and its place taken by the power-bloc, but the new disaster had persuaded a lot of people that any kind of division might be fatal. The bathies had attacked from the sea, and in consequence the powers had co-operated in fighting them, despite Eurasian suspicions. But the characteristic sphere of Twentieth Century activity was the air. Men began to consider more carefully the possibility of world-wide co-operation in the air. If there is peace in the air, they argued, the land can look after itself. Besides, might not the next alien attack come from the skies? Some such reasoning as this led to the establishment of International Aircraft and Airways Inc., which held such an anomalous position in man's affairs during these closing years of the century—masters of the air and yet not completely masters of themselves.

But man's chief enemy was still himself. He had come through a serious trial triumphantly. He was encouraged to believe that he would always be able to conquer his enemies, without any moral rehabilitation. The speed with which recovery was made after the water subsided was astonishing. In fact, it was a marked feature of every catastrophe that overtook man, now and in the years to come, that he was always capable of restoring the technical aspects of the civilisation that had nearly been submerged. No longer was it necessary to pass through centuries of poverty and backwardness, a painful toiling through a new Dark Ages. On each occasion when humanity was at bay, the scientists and technologists were protected. Farmers, mine-workers, transport men, artists and philosophers could be spared—it was an easy matter to train new ones or to train none at all when, as in the case of artists and philosophers, they were regarded as luxuries.* So long as the experts and the libraries

* Farmers, as a separate class, were disappearing, being merged with scientists and technicians.

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and the sources of specialised knowledge were protected it would always be easy to rebuild. Indeed, each new catastrophe led to progressive rationalisation. Millions died, but they were the unskilled and the inefficient, peasant proprietors and workers whose places could easily be taken by robots. Synthetic industries flourished, agronomics steadily gained ground over agriculture, production per head jumped to an unheard-of level. Many people secretly welcomed the cataclysm, which had effected what they had always longed for but never dared to put into operation. Each new phase of society that followed one of these disasters was more self-sufficient, more highly disciplined, more philistine than the one preceding it. Culture became swamped in the ethics of technocracy.

And so the results of the bathy invasion were less salutary than might have been supposed. Too many people, and among them those who held power, were dazzled by their own brilliance. Human arrogance tended to become greater rather than less. Bocker and some Japanese scientists had saved the race. For what? By and large, to continue its own internecine squabbles.

The Settlement of Mars

FROM THE SEVENTEENTH to the Nineteenth Centuries unhappy men had one possible escape: America. In the Twentieth Century the Americans themselves frequently wanted escape: they chose Mars.

There was no doubt that men intended to visit other planets—conquer space, as they put it. Mars was the first choice, as it was the nearest, and it was believed to offer conditions similar to those on Earth. (They never considered the Moon as an area of settlement. The Moon only appealed to adventurers and romantics who had never seen its other side.) Moreover, planetary invaders had come to Earth—one group at least, perhaps two. Anything they could do Earth could do better.

The general pattern of Twentieth Century exploration and discovery was as follows: the British pioneered, the Americans consolidated, the Russians claimed the credit. Mars was no exception.

But before we consider the actual historical events which led to Mars becoming part of the Oceanic political system there is a charming myth which I cannot resist recording. The Negroes of America claimed that they colonised Mars in the year 1965. There is certainly no evidence for this and the story is undoubtedly apocryphal, but it throws light in an unexpected way on conditions in North America. Out of a total population of some 200,000,000 about 15,000,000 were of Negro stock. The descendants of slaves, they did not enjoy full social equality with the Whites. Many of them sought consolation in religion, a kind of vulgarised Christianity, and for these Negroes there would never be peace and security until they found the way to

Zion. In 1965 the lot of the Negro showed no signs of improvement. Intensified race riots and lynching, actively engineered by the Government,* increased the feeling of despair of this unhappy race. Once again their natural enemies, the Whites, were preparing for destruction on a large scale, to the usual accompaniment of pious slogans: the Rights of Man, the Four Freedoms, the World State, the Proletarian Revolution. To the Negroes these slogans only served to obscure the one constant thing in life, suppression of the Blacks by the Whites. But there was a difference now. There was hope in the sky. They could see Mars, shining redly, a refuge for the distressed, a retreat for the victims of Earth.

The story of the exodus to Mars took its place alongside an older one, the exodus from Egypt. The Negroes took to their rockets and left Earth while the atom bombs of the Third World War were exploding all around them. For twenty years they lived peacefully on their new world, building up a replica of the life they had loved on Earth, despite its hardships, but retaining a bitter memory of their old persecutors. The Lord God who had visited plagues upon the Egyptians was now visiting atom war upon the Whites; the Lord God who had parted the waters of the Red Sea had guided refugee rockets to a new land of Canaan. But thereafter the parallel ceases to be a close one. One day a strange rocket came from the skies and out of it stepped White men—but as supplicants, not as conquerors. The White race had destroyed itself, they said. They were the only survivors and had just managed to salvage enough metal to build their ship and escape from the desolation. And now they begged for mercy, to be taken in, not as masters, not even on equal terms, but as servants. And then comes the true beauty of this story, its genuine mythical quality. The Negroes, who had remembered the Whites with hatred, who had even dreamt of revenge, found that their bitterness had no substance in it. After a moment's hesitation they took in the newcomers as equal partners.

This story has fortunately been preserved for us by Bradbury, who did for the Martian Immigration what Moses did for the

* See chapter 3.

Jewish Exodus and Parkman for the Oregon Trail. It would be pleasant to record this as truth, to write of a multiracial settlement of Mars and the establishment of the City of God. But historical fact is a depressing experience. The settlement of Mars had far more in common with the colonisation of Africa and Asia than with anything else. All the familiar elements were there: desire for wealth, the exercise of power, unlimited land. But there were also courage and the occasional disinterested act.

The first landing on Mars was made by two Englishmen, Weston and Devine. The date is uncertain but it was probably during a lull in the Third World War. Our source for their expeditions (they made two) is not Bradbury, who appears to have been concerned only with the later, officially-sponsored American missions, but C. S. Lewis (*Out of the Silent Planet*). Devine and Weston, a business man and a scientist, were interested only in the commercial exploitation of the planet. In them we have a classic example of the combination of ruthless greed, courage and endurance which seem to have been characteristic of the white races. They discovered a civilisation which was in many respects more advanced than their own, and which they failed utterly to understand, just as the Spaniards failed to understand the civilisation of the Incas. To them the inhabitants of Mars were potential victims of terrestrial exploitation. They would unthinkingly have destroyed those people for the sake of natural resources which were running short on Earth. It was not their fault that they failed.

My chief concern is with Earth, but from henceforth the fates of the two planets were intertwined. It is necessary to give a brief description of conditions on the smaller planet as they existed at the end of the Twentieth Century A.D. One thing that is immediately apparent is that there was no race on Mars corresponding to the invaders of England, as reported by Wells. There were in fact three races on Mars, and they lived in perfect harmony with each other. The most highly developed were the *sorns* (or *séróni*). Lewis describes them as 'spindly and flimsy, twice or three times the height of a man . . . crazily thin and elongated in the leg, top-heavily pouted in the chest, stalky,



Hrossa group martians with machines

flexible-looking distortions of earthly bipeds'. They lived on the highlands and were apparently the intelligentsia—for the three races were not rivals but complementary to each other. The *sorns* were no good at practical things or poetry.

The *hrossa* lived on the lowlands, especially in gorges. They had a clumsy, beaver-like appearance, and the third and most intelligent member of the second expedition at first believed they existed at the 'old stone age' level. He discovered, however, that they practised agriculture with a high division of labour, and were skilled in poetry and music. The third race, the *pfifltriggi*, lived in the broad lowlands, and were tapir-headed and frog-bodied, and were excellent craftsmen, especially in gold.

The ruler of Mars (which the inhabitants called Malacandra)

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welcomed the newcomers and wished to speak to them. But Weston and Devine, obsessed by terrestrial fears and suspicion of strangers, completely misread his intentions. They believed he intended to sacrifice them to his gods, whereupon they returned to Earth and prepared for a return voyage on which they would take a third person to pacify the gods of Malacandra. It was typical of human arrogance and blindness that they should automatically assume that the Malacandrans were savage primitives. By chance they had kidnapped and taken with them a philologist named Ransom. It is due to his intelligence and resource that we know what we do of these fascinating races. Once landed on Malacandra, he escaped from his captors, and lived for a while with the *hrossa*, befriending them and learning their language.

The Malacandrans believed that the solar system had been made by Maleldil the Young, who still ruled it. His purpose was carried out by spirits called *eldila* (probably analogous to the angels of the Christians). The Malacandrans claimed that they could see the *eldila*, although light passed through them. Again using the analogy of Christian doctrine, this would imply that all Malacandrans were in an advanced state of beatitude, without which the eye can only discern grosser forms. There are references to these *eldila* in the works of Bradbury, although conditions on Mars had changed considerably by the time of the American invasion. It is also possible that the Vitons of Earth* were akin, in the way that devils are akin to angels—that is to say, they were creatures of air whose wills had been corrupted. Ransom never saw an *eldil* but he heard the voice of one.

This was Oyarsa, the greatest of the *eldila*. He ruled Malacandra and gave Ransom instruction in Malacandran metaphysics. He claimed that all body is movement. At one speed you smell it, at others you see it or hear it or do not know it at all. (Terrestrial physicists were only approaching this truth at the time.) When a thing moves at immense, unimaginable speeds† it is in all places at once. The swiftest thing we know is light, yet we see by it. The *eldil* is as swift as light, but his own

* See chapter 6.

† 'Infinite' speeds?

light is invisible to us, i.e., blackness. Our own light is as tangible as water to him, he can touch it and bathe in it. Things which are firm to us are like clouds to him and he can pass through them.

Oyarsa told Ransom that Earth (which he called Thulcandra) was the silent planet. The presiding *eldil* had become bent (i.e., corrupt) and since then no message had been received. In Christian terms I imagine this to mean that the fallen angel, Lucifer, now controlled Earth and was ministered to by the Vitons. Using Oyarsa's own terminology, Ransom told him that the *eldil* of Thulcandra intended conquest of the solar system and advised him not to allow any more men to visit Mars. He even suggested that he and the others should be put to death, to avoid infection. Weston, in his original interview with Oyarsa, had spoken loftily of his scientific mission. He claimed that the life force on Earth had overcome all obstacles and was now pressing forward in its highest form (civilised man) to the 'conquest of space' for the perpetuation of the species. Lower forms of life (among which Weston arrogantly included the Malacandrans) would be superseded. Oyarsa's reply (which he repeated to Ransom) is worth quoting:

I see now how the lord of the silent world has bent you. There are laws that all *hnaus* (rational creatures) know, of pity and straight dealing and shame and the like, and one of these is the love of kindred. He has taught you to break all of them except this one, which is not one of the greatest laws; this one he has bent until it becomes folly and has set it up, thus bent, to be a little blind Oyarsa in your brain. And now you can do nothing but obey it, though if we ask you why it is a law you can give no other reason for it than for all the other and greater laws that it drives you to disobey.

I have already mentioned the increasing spiritual degeneracy of men during this period, but nothing makes it plainer than the comparison of Man with Malacandran.

It is likely that the two expeditions of Weston and Devine were kept secret. They themselves were thoroughly seared by their experience—it is even possible that Ransom threatened their lives if they divulged the secret. Ransom himself was completely converted to the Malacandran point of view, and

believed it would be a tragedy if Man conquered Mars. He was convinced that the Malacandrans had attained a much higher stage of spiritual development but he realised that they would be an easy prey to terrestrial technology. Unfortunately, even by keeping quiet he could only delay the inevitable. Perhaps he hoped that, given a few years' breathing space, they would be able to organise some kind of resistance. But in 1999 the first American expedition landed on Mars and thereafter nothing could be gained by suppression of the facts. It is probable that Lewis published his book after that date.

But before describing the American settlement, it is necessary for us to come to terms with a very difficult problem. We don't know when Weston and Devine made their second voyage but I am inclined to date it at about 1970. Before that it is doubtful if technical development was sufficient to admit such an undertaking; after that date it would hardly have been possible for a private venture to have taken place at all. (The American expeditions were backed by all the resources of the State, the American section if not the whole of Oceania.) The civilisation discovered on Mars by the Americans was so different from that reported by Ransom that at first it is difficult for us to believe they had visited the same planet. But there is no doubt of that, and we must search elsewhere for a solution. The obstacle to belief is that in a short period of not more than thirty years society on Mars changed out of all recognition. One theory, put forward by Charlatan, was that in the meantime Mars had been invaded and conquered by a race from another planet. The 'Space Era' was just beginning and it is not impossible that another race got to Mars first, exterminated the inhabitants and had barely settled down when they in turn were suppressed by Earthmen, obeying Weston's 'life-force'. Picklewit has a subtler theory. He points out that our conception of a year is tied to Earth's rotation, and that an Earth-year may, when divorced from this rotation and measured solely by chronometers in a qualitatively different field of motion, be immensely lengthened or shortened in terms of terrestrial rotation. This is a highly metaphysical speculation and only a Picklewit could embrace it, but I give it for what it is worth. He

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refers to Oyarsa's statement that 'heavenly' years varied from planetary years, and that these differed from each other. This would result in a marked difference in the *sense* of time—thirty years on Earth might be equivalent to a period on Mars of three hundred years *of terrestrial quality*. Such a theory would certainly allow ample time for the considerable changes which did in fact occur during the thirty years between Ransom and the first American expedition. Let me give an actual example: a man might leave Earth and spend what seemed to him an extremely lengthy period on Mars, perhaps several hundred years, but on his return to Earth he would find he had been absent a mere score of years. Such an experience would lead to the belief that Mars aided longevity. I have searched for evidence of this but have so far been unsuccessful—although the low gravity on Mars is known to have been beneficial to invalids. I hope someone else will take up the challenge, as I grow old and my eyes are dim from too many wriggles. It is worth noting here that Bedford and Cavor claimed that time seemed much shorter on the Moon than on the Earth; if this destroys Picklewit's theory, so much for Picklewit.

In his book *The Silver Locusts* Bradbury gives us fascinating glimpses of a civilisation that has now gone beyond recall. A well-to-do Martian family lived at a technological level that compared favourably with that of the Twenty-Second Century on Earth, but with a grace and nobility that had been absent from Earth since the Eighteenth Century. Their houses were supported by crystal pillars with golden-coloured fruits actually growing on the walls. The house was cleaned quickly and efficiently with handfuls of magnetic dust. When a man wished to read he would pick up a metal book with raised hieroglyphs over which he would brush his hand and a voice would speak or sing. In the hot evenings the pillars rained cool streams. As the light passed the house closed in like a giant flower. A fire table bubbled with silver lava, on which the cooking was done. The prevailing method of transport might have come from some old fairy tale, such as the Arabian Nights—a Martian sat on a white canopy flown by thousands of flame birds attached by green ribbons.

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The Martians were well advanced in astronomical knowledge, and had apparently considered Earth as a field for settlement, but had rejected the idea on the grounds that the planet was incapable of supporting life. They believed that Earth was handicapped by too much oxygen, which would overpower any living organism. It should be remembered that, according to one theory, the Martians themselves may only recently have emigrated from another planet. Bradbury reported the existence of dead cities, old canals, rivers and lakes that were now empty. Ransom saw none of these but his experience of Mars was very limited. There is little doubt that the thinness of the atmosphere was accompanied by a lack of water that must have handicapped human beings seriously but which did not seem to embarrass the race that lived on Mars to any great extent. Altogether, it appears to have been an elegant and sanely balanced society, one which had solved a problem that has baffled men to this day, the satisfactory harmonisation of civilised values with an advanced technology.

The first American expedition to Mars, in February 1999, under the command of Captain York, was lost. It was discovered later that the crew had been shot by angry Martians. The second, headed by Captain Williams, arrived in August of the same year. The crew received two shocks: it was discovered that the Martians could understand and speak to them (by some kind of telepathic contr ' beyond their understanding*) and that in general the natives showed no curiosity about their visitors. It was the second of these two reactions that angered the Earthmen. They entertained some very fond ideas about the nature of life and intelligent creatures, and one of their favourite dogmas was that curiosity was a mark of high intelligence. This did not seem to operate among the Martians at all. From a terrestrial point of view no living creature could have attained such an advanced stage of civilisation as was found on Mars without incessant application of the faculty for curiosity. Yet the Martians were demonstrably advanced, they showed no signs of decadence, and at the same time they betrayed no

* When the Earthmen showed amazement that some Martian women could speak English, the women snipped back, 'We're not speaking, we're thinking!'

signs of inquisitiveness. This struck a severe blow at Man's conceit of himself as the Wonder of the Universe. When Williams boastfully told a Martian he had 'come 60,000,000 miles from the Earth the Martian did not open his eyes wide with astonishment or call him a liar but nonchalantly replied that the distance was only 50,000,000 miles at that time of year. There was perhaps a kind of *fin-de-siècle* spirit of boredom among the Martians, but this did not seem to affect their capacity for graceful living.

The fate of this second expedition gives us considerable insight into the Martian mind, besides being a delicious little comedy in itself. The crew was taken to the town of Iopr, where they noticed that the local inhabitants wore masks of different colours and expressions, according to the mood they were in. One gentleman, we are told, 'was a tall, vaporous, thin man with thick blind blue crystals over his yellowish eyes'. He appeared to be Town Clerk and got the captain to sign a form, which the captain did complacently enough, no doubt believing that he was being given the freedom of the city. The crew were then sent to a special room where they were enthusiastically welcomed as visitors from Earth. Everyone there claimed to be from Earth or Jupiter or Saturn or one of the other planets, though the places they mentioned on Earth were unknown to the crew and they appeared to think the planet was entirely sea or jungle. Too late the crew discovered they were in an insane asylum. Mental disease of this type was endemic on Mars and it had been concluded as a matter of course that the captain and his crew were madmen.

The Martians were very strict about the isolation of such cases as the hallucinations could be transferred to others by telepathy or auto-suggestion. The Martians were far more delicately constructed psychologically than Earthmen, and the keenness of their 'sixth sense' had as a corollary a marked tendency towards imbalance. The psychologist believed that the crew and their rocket were secondary hallucinations, and that only the captain had an objective existence, projecting the other phenomena on to his neighbours. The captain was therefore shot as incurable. The continued existence of the rocket and

the remainder of the crew caused the psychologist to regard them as hallucinations with time and spatial persistence. They also were shot and the rocket destroyed, but when their bodies failed to dissipate the psychologist believed himself irremediably contaminated and committed suicide. This incident clearly disposes of the view that the Martians were devoid of natural curiosity, but there is no doubt that they treated all new phenomena with the utmost caution.

The third expedition, under Captain Black, similarly came to grief (April 2000). With sixteen men Black landed on the opposite side of Mars from York and Williams and found a Victorian-type town, which each man could identify as his own native place. The identity in each case appeared to be exact, even including an ancient piece of music called 'Beautiful Ohio'. In this town (or towns) each man met his long-dead relations and was told they were being given another chance in another life. Once again the Martians were using their weapons of telepathy, hypnosis and power over memory and imagination. Each man was the subject of a private hallucination, built out of his mind and given substance by the Martians. All the members of this expedition were killed and buried.

The ultimately successful attempt to maintain a footing on Mars was made by Captain Wilder with twenty men (June 2001). Once again men were aided by their insignificant allies, the microbes. This time there was no opposition from the Martians—like the host of Sennacherib, they were all dead men. Between the third and fourth expeditions a deadly germ (identified as that which produces chicken-pox on Earth) had done its work. The Earthmen came to a city where the inhabitants lay blackened and brittle corpses. They had been dead about a week. It was believed that the earlier expeditions had imported the germs. But before their return the crew were able to carry out a cursory examination of the area in which they had landed. Mars, they found, was a planet of dead civilisations. Four other cities they visited had been empty for thousands of years. A book of philosophy was discovered which was estimated to be ten thousand years old, and even more remarkable, a reel of Martian music, fifty thousand years old, which still played.

The expedition had been equipped for such a possibility and among its crew was an archæologist named Spender. In many ways he resembled Ransom and other intelligent Earthmen who were appalled by the destructive faculties of their fellow-men, and were deeply impressed by the evidence of Martian culture. Ransom had wished to protect the Malacandrans from his own people, but had been powerless to do so. In fact, it was left to another race to supersede the Malacandrans he knew, but it was nevertheless a race considerably in advance of men. Spender went farther than Ransom. Although Martian civilisation was organically dead its values still remained in its art, and Spender wished to preserve them from the destructive hand of man. Whatever was fine and noble in Martian art, in the empty buildings and frescoes and sculptures of the dead cities, would inevitably be fouled and put to base uses by the terrestrial barbarians. Spender concluded that the Martians had known how to live with Nature. Men had lost their religion and were tortured by doubts about the purpose of life. In a sympathetic passage Bradbury describes this clash between two cultures, one extinct and alive, the other extant and dead.

Man had become too much man and not enough animal. The men of Mars realised that in order to survive they would have to forgo asking that one question any longer: 'Why live? Life was its own answer. Life was the propagation of more life and the living of as good a life as possible. The Martians realised that when they asked the question: Why live at all? at the height of some period of war and despair, when there was no answer. But once the civilisation calmed, quieted and wars ceased, the question became senseless in a new way. Life was now good and needed no arguments.

They quit trying hard to destroy everything, to humble everything. They blended religion and art and science, because, at base, science is no more than an investigation of a miracle we can never explain, and art is an interpretation of that miracle. They never let science crush the æsthetic and the beautiful. It's all simply a matter of degree. An Earthman thinks: 'In that picture colour does not exist really. A scientist can prove that colour is only the way the cells are placed in a certain material to reflect light. Therefore, colour is not really an actual part of things I happen to see'. A Martian, far cleverer, would say: 'This is a fine picture. It came from the hand and mind of a man inspired. Its idea and its colour are from life. This thing is good'.

Having thought thus far, Spender took action. He tried to kill the rest of the crew to save Mars from exploitation, but was finally killed himself.

Nothing could save Mars now. There were not sufficient enlightened men to hold back the wave of settlers that poured through space. Mars was the new West, with Boom Towns springing up as each new batch of pioneers arrived. The migration began in August 2001, in response to Government posters showing a finger pointing upwards and with the inscription: THERE'S WORK FOR YOU IN THE SKIES: SEE MARS! It took time for the idea to catch on. It was risky, conditions were uncertain, and there were depressing tales of a Martian affliction called The Loneliness. The first men on Mars felt very lonely as they sat in their camps and turned their eyes to Terra, a point of light in the sky. Only the adventurous would be likely to go while Mars was practically denuded of vegetation—and generations of insurance and pensions had whittled away the spirit of adventure among men. A few community gardens were got going in hydroponic plants. Two hours' rain caused seeds to sprout and grow overnight into huge trees, flooding the valleys with oxygen. Frosted food was brought from Earth in flying icicles. By February 2002 a dozen small towns had been built, with a population of about ninety thousand. The first settlers were lean, stringy, pioneer types. The second wave were townsmen. All were Americans as were the rockets. The rest of the world was too busy with preparations for the coming Fourth World War (according to Bradbury, who tended to share the American view that Europeans regarded war as a fascinating hobby). He also noted that the Earthmen kept away from the Martian ruins just as the Anglo-Saxons avoided the Roman.

There were at this time two indigenous races on Mars. One of them was almost extinct and was very rarely seen, as they hid in waste places where men seldom ventured. It is possible that they were the remnants of the *hrossa* and *pffltriggi* mentioned by Ransom—but the pioneers were not the kind of people to bother their heads over such matters. By the time anthropologists appeared on Mars these people were sharing the fate of the Red Indians, and specimens of them were sought

as eagerly as gold nuggets and metal ores in the deserts. The other race were described as 'round luminous globes of blue light', acting intelligently. I think we may assume that these were the *eldila*, no longer masters of the planet yet still spiritually superior to Man. There were no signs of a desire for vengeance or retribution on the part of these beings—they certainly had not sunk to the level of the terrestrial Vitons whose activities were so soon to distract attention from Mars. It was noted that they appeared to be full of compassion and they were known to save men (whom they had no cause to love) from accidents; there is a case recorded of a pioneer who was lifted from the path of a landslide by these semi-invisible beings. Communication was established with them and it was discovered that they referred to themselves as the Old Ones, old Martians who had forsaken the material life. This encourages me to suppose that a material being in an advanced state of beatitude could dispense with his corporeal body and attain the state of an *eldil*. They claimed that they had once been 'men' (the term is certainly not accurate) but had discovered the way to a free soul and intellect, putting away the sins of the body and living in God's grace. There is a very strong case for identifying some of these creatures with Ransom's third race, the *sorns*. If we neglect this possibility, then we have no knowledge at all of the fate of this noble race. I need hardly say that Picklewit disagrees with this theory.

In 2003 there was a mass exodus of American Negroes to Mars. This time it was no myth but undeniable fact. The peak period of early colonisation occurred in the two years following. New towns sprang up like mushrooms, often named after the earliest settlers—Wilder Town, Nathaniel York Town, even Ender Hill. The place where the Martians killed the members of the first expedition was called Red Town. The site where the second expedition was destroyed was called Second Try. Other settlements celebrated the materials that led to their erection: Iron Town, Steel Town, Aluminium City, Electric Village, Corn Town, Grain Villa. It was rather similar to what occurred in Russia earlier in the previous century. Maps showed Detroit • II, just as American maps showed New York. By 2005 it was

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felt that Mars was coming under control, and that it was safe for the older people to come out. And so they came, with nothing to offer a new planet but with curiosity amazingly revived: 'the dry and crackling people, the people who spent their time listening to their hearts and feeling their pulses and spooning syrups into their wry mouths, these people who had once taken their chair cars to California in November and third-class steamers to Italy in April, the dried apricot people, the mummy people, came at last to Mars', wrote Bradbury.

Many of these people had come to Mars to escape war on Earth. Everyone knew it was coming, had to come—the same terrifying business all over again, cities atomised, populations massacred, the hunger, disease, mutilation, nerves shot to pieces. And yet Mars was no escape. The Fourth World War broke with hideous ferocity, but although it never reached Mars the settlers were natives of Earth and there was something in them that would not allow them to stay. Before it came they thought they wanted to avoid the war, but when it came they found they had to take part. They could not watch from their distant refuge, they had to take their chance with the rest of mankind.

I am necessarily running ahead of my story. The watchers on Mars had no need to wait for radio messages. They saw the war break out. Earth appeared to explode, and for a moment they thought it had disintegrated into a million pieces. For about the space of a minute it burned with an unholy dripping glare, three times its normal size, then dwindled back to what it had been before. The suicidal struggle between nationalism, power-bloc and World State had at last erupted in a holocaust that buried all the fond notions of idealists and power-maniacs under a mound of radioactive rubble. Then came the light-radio message from Earth:

AUSTRALIAN CONTINENT ATOMISED IN PREMATURE EXPLOSION OF STOCKPILE. LOS ANGELES, LONDON BOMBED. WAR. COME HOME. COME HOME. COME HOME.

They did.

Inevitably some stayed behind. There must have been the few who resisted the call because their weariness of war was

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stronger than their attachment to their own race—although mutual destruction is an odd expression of racial solidarity! But there were others who were accidentally left behind, rough men in the backwoods who visited the towns perhaps once a month and who were otherwise beyond contact. We know the story of one of these, Walter Gripp, who went to town once every fortnight, probably to paint it red, or perhaps blue—he was a miner in the blue Martian hills. But on this occasion he found the town deserted. He wandered through the empty streets, utterly ignorant of what had happened; at the same time Ronald Duncan was having a similar experience in London.* Each of them set out to find company, with the fear in their hearts that they might be sole survivors on deserted planets. Gripp discovered a woman a thousand miles away by telephone, in New Texas City, and went to her. But some company is harder to bear than absolute solitude. Both he and Duncan ran away. Another survivor, Hathaway of the fourth expedition, lived in a stone hut with his wife, son and two daughters—but they were robots, the originals having been buried.† When Hathaway died, the robots remained, but we do not know their fate. As late as April 2026 the leader of the successful fourth expedition, Captain Wilder, returned to Mars. He had been rusticated for questioning colonial policy and had spent the intervening years making exploratory journeys to Jupiter, Saturn and Neptune, which he declared unfit for human settlement. He had never returned to Earth but had become a Flying Dutchman, roaming restlessly through space. A deserted Mars was his first intimation of what had happened on Earth. For a whole generation the development of Mars was at a standstill.

The rest of the story of Earth's contact with Mars is part of man's exploration of space and his exploitation of the solar system, which I shall refer to in due course. I have concentrated on the early settlement of Mars because it was man's first venture outside his own planet. The difficulties facing the

* See next chapter.

† I shall devote a later chapter to the remarkable progress made in robot production.

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colonists were not remarkably different from those facing the early European adventurers who settled in America, Africa and Australia. The problem was an intensified one but it was not beyond man's capacity. Progress in this field was also partly dependent on events back home, another close parallel with the earlier migration. The Fourth World War held up the Martian settlement, as indeed it held up everything else except the progress of destruction. But, as I have said in an earlier chapter, man's control of his own planet was now so secure he could overcome almost any disaster short of complete annihilation. Even when he nearly achieved this in the year 2005 it was only a few generations before his material recovery was complete. But the recovery, it should be insisted, was scientific and technological. Spiritually man was heading back to barbarism, but as this is a much subtler field of activity his defeats were recognised by only a few.

Mars was resettled by two families named Thomas and Edwards—one of those odd little titbits of information that adventitiously litter our chronicles. Over a hundred years later we find Martian society going about its business confidently and efficiently, just as though there had been no hiatus in development. Arthur C. Clarke refers to the intense patriotic feeling they felt for their planet; just as Europeans became one hundred per cent Americans, so Earthmen became one hundred per cent Martians (*Islands in the Sky*). They hated the word 'colonist' and they were noted for their frankness and generosity. The wealthier ones still sent their children to Earth for education, though this was probably deplored by the others. The sterile brick-red soil was being turned up in the valleys, Airweed was being planted and was breaking down the minerals in the ground and releasing free oxygen. The thinness of the atmosphere had always been one of the major difficulties in the way of the settlers, and a serviceable breathing mask had been devised to overcome it. Mars was thickening its atmosphere. Clarke repeats what Bradbury had already told us about the few remaining Martian races. They had retired to the more inaccessible parts of the planet and in general ignored the colonists. The young were said to be friendly, but there was

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little fraternisation. They were still marked by their lack of curiosity, astonishing to men. (It is even more astonishing when we consider that this characteristic was probably not native to them, but acquired.) A widespread theory held that germs brought by men killed off all but the toughest. Some scientists, including Lessing, believed that the majority of Martians emigrated to Venus before the Earthmen arrived. Unfortunately very little research on these lines was carried out. It was considered academic and men were becoming increasingly utilitarian and commercial in their outlook:

The Fourth World War

IT HAS OFTEN amazed me, in the course of my researches, to learn how much pain and suffering the human race can bear. When we come to the Fourth World War of 2005 the amazement is increased to include the poor old Earth itself.* We have already been, in imagination, on Mars and seen Earth swell momentarily to three times its normal size. Now we will come nearer home and see what really happened.

First a note on prophecy. The historians of the past used to enjoy the evaluation of those factors which, they claimed, dictated historical development. It is now clear that the most important of these factors was false prophecy, which they entirely overlooked. Ever since man began to rationalise he has been proclaiming that certain things must happen and, without exception, they never have. The early Christians looked forward to an early Second Coming, which had a marked effect on their social activities and particularly their sexual attitudes. When they were frustrated they modified the theory to one of a postponed Millennium, but with a fixed date—which was never kept. Later the Calvinists adopted the theory of predestination which gave them enormous confidence in their personal future but helped destroy religious faith. Then the Marxists became convinced of the ultimate triumph of the proletariat, which led them to dismiss morality as a mere gloss on society. After the First World War it became fashionable to claim that another would destroy civilisation. After the Second they said, Well,

* Long after the war itself was forgotten its impact was remembered. Even today people speak of the Explosion, which is linked in the racial mind with the Flood and the Whirlwind, the Holy Trinity of Disasters.

we managed to survive that but the next will certainly finish us off. But the Third was fought with restraint. Men realised the danger of using atomic and hydrogen bombs indiscriminately and only dropped them on unimportant peoples. Then everyone heaved a sigh of relief and said, We haven't the sense to keep the peace but we have enough sense to know when and where to stop. Then came the Fourth World War which was quite merciless and insane, and laid desolate a large part of the Earth's surface. Even so, it was only the material side of their civilisation that men had destroyed. They still did not succeed in excising the capacity to recover and rebuild. That had to come from inside.

A Twenty-First Century historian named Gerald Heard liked to trace a twofold progress in human affairs, one external or material, the other internal or psychic. Nowhere is this duality better illustrated than in the case of the Fourth World War, although we must never forget that the two sets of causes were in fact inextricably intertwined. The researches of Eric Frank Russell have so revolutionised our knowledge of this process that I intend to follow Heard's lead. To integrate the two sets of causes without warning would baffle the reader. I also admit that it is probably beyond my powers. I therefore intend to describe the events leading up to the war in the orthodox way, then to give the additional information uncovered by Russell and so put these events in their true perspective.

When I left the Earth to go to Mars I had referred to an advance made by the World State protagonists, in the shape of International Aircraft and Airways Inc. Their control was only partial, it is true, but it is symptomatic of the fear and uncertainty that were assailing the power-bloc oligarchies that even they were prepared to accept such a restriction on their powers. And yet it is not as surprising as it appears, for the antagonism of the three great rivals was at best artificial, and so long as the power of each was restricted to the same extent they could still appeal to the atavistic fears of their proletarian populations. In fact, each oligarchy would willingly have accepted the

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World State if it could have been certain that it, and not one of its rivals, would have controlled it.

I.A.A., as the organisation was familiarly called, is interesting because it was the first completely international body to wield real power. It was governed by a Board of Directors and an International Air League, which in fact represented the interests of the power-blocs. This organisation contained all the faults one might expect from the first experiment of this nature. It pretended to be democratic, because the word 'democracy' was still a most effective catchword in winning the support of the masses—not that their active support was really necessary, but it was better to have them quiet than restless. No one in Government circles believed in democracy any longer. Despite the experience of the first two World Wars, when democracies, even if imperfect ones, had defeated dictatorships, it was still fondly believed that democracy was inefficient. (Of course, no power-seeker could ever admit such a thing, for it would ruin his career.) I.A.A. was becoming inhuman. Promotion was becoming more and more standardised, initiative was being smothered by routine, and the young idealists who had joined the organisation in large numbers in its early years were bitter with frustration. Desertions were increasingly frequent—for each officer was expected to devote the rest of his life to his chosen career and normal resignation was forbidden. Matters came to a head in 1987 v. en Commodore von Manteuffel, one of the most promising younger officers, also deserted and joined a resistance movement. This was a serious breach in I.A.A.'s solidarity and could not be ignored.

The confusion of this period is excellently illustrated by the tortuous aims of this resistance movement. It wished to take the final step towards the World State but knew that it would never be achieved by the I.A.A. as it was then constituted. It therefore appealed to the lingering nationalist sentiment which was particularly strong in Italy, China and Poland. This was a typical Twentieth Century manoeuvre. Capitalist democracy had allied itself with Communism in the Second World War; after the war the Communists had accepted assistance from ex-Fascists in their attack on Capitalist Democracy. Now the

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World Staters allied themselves with the nationalists to destroy the power-blocs—for I.A.A. was merely a blind for the shared hegemony of Oceania, Eurasia and Eastasia. The guiding spirit of the new movement was David Knox, a young man who called himself Titan Junior—not a very encouraging name for those who still hoped to preserve their liberties, but reminiscent of the man who called himself Stalin and the man who called himself Hitler. He had made a reputation as an inventor, his chief pride being a machine which could fly from London to New York and back in four hours and circle the globe in twenty-four. It was to this man that Manteuffel offered his services.

This movement was remarkable for its time because it was actually led by young men. Before this the young men had continually complained that they were the victims of the uninspired leadership of old men, although they had eagerly thrown all their energies into accepting and carrying out their orders. The real basis of elderly conviction was that evil cannot be defeated, which resulted in conservatism and stagnation in their policies, a rationalisation of the belief that the devil you know is preferable to the one you don't know. The younger men always thought that evil could be annihilated. There were two weaknesses in their position: in the first place they thought that evil could be defeated by energy alone; in the second place human beings do not stay young for long. A young man is always a potential old man but an old man is never a potential young man.

Viewed from Earth level, the Fourth World War appeared to start when the nationalists of Italy, Poland and China, allied with the revived World State resistance movement, flung themselves against the power-blocs and their obedient servant, I.A.A. In the early stages of the struggle (which was mercifully brief) Knox appears to have adopted the role of a Messiah. There was a strong aura of mysticism about his leadership, Nordic in feeling, which reminded some of the older people of a similar movement which had once prevailed in Germany. Knox was successful in so far as he smashed the power-bloc system to smithereens, but in doing so he also smashed practically everything else to smithereens. Probably this was the best possible

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medicine for mankind: a painful purgation and a new start. The dream of the old Russian Nihilists was at last coming true. It is extremely doubtful if Knox's movement would have benefited man in any way if it had survived. It offered leadership, a focus for loyalty, scope for obedience—but there was already an abundance of these things. I cannot regard the destruction of Knox and his theories as a disaster. They were merely the catalyst which gave human society a fresh stimulus. In fact, Knox might well be remembered as the man who laid Paris waste from the air and might have done the same to London had it not been for a rare act of nobility by the Presidential Council of Airstrip One. Knox threatened to drop token bombs on Trafalgar Square, to bring I.A.A. to heel, and entrusted the task to Mantuffel. But when he flew over the Square he found it deserted except for the Council, which was seated at an open-air lunch. Once again the Gauls were invading the Roman Senate, and the fate of London hung upon their conduct. But Mantuffel was no Gaul. He was not the man to murder in cold blood, not even for the sake of an idea. Thus London was spared the fate of Paris (but only for the time being). As for Knox, it is believed he threw himself off a high rock on the Isle of Iskar, north of Lofoten.* It was a typically dramatic gesture, but the world was sick of dramatic gestures. His young men went into battle with the usual idiocies on their lips and in their hearts. It was a race that had to be destroyed. It certainly showed no compunction about it.

There are several levels on which one can approach this conflict. I have referred to the merely political, the least satisfying of all. To Aldous Huxley the underlying causes were a combination of economic and spiritual—that is to say, whatever the modes of government, whatever the political ideals that motivated men, this war had to be fought. Whether people were nationalists, oligarchs or World Staters, they bred too much and too quickly. The population had by now become so great the world groaned beneath it. But not only were there too many people, the limited amount of cultivable land was being ruined by bad farming. The deserts were spreading and the forests

* See Michael Arlen, *Man's Mortality*.

dwindling. Man's chief enemy was his short-livedness: he manipulated materials which were ageless, yet he himself, as an individual (and despite the success of the herd-ideology, man was still an individual in his private thoughts), died very soon after he was born and never had a chance to adopt a long-term attitude to existence and posterity. One generation was hardly ever punished for its own mistakes. As they always suffered from the mistakes of previous generations, men developed a vindictive strain which intensified the degeneration. Bi-economically man was at the mercy of a recurring cycle: hunger to imported food, imported food to a booming population, and so back to hunger. Hunger caused total wars, total wars caused hunger. This was only part of the truth, for Huxley did not take into account the calculating policy of the oligarchical governments, who regarded war as a positive social good. But Huxley discounted war as a fundamental cause of catastrophe. It was merely a condition. Belial (one of the names for the wicked *eldil* who controlled Earth) would have brought destruction without the agency of the hydrogen bomb or synthetic glanders. Men had become bumptious: their heroes were megalomaniacs like Knox or Weston, global or spatial imperialists. They congratulated themselves on their 'conquests'—of Nature (which included the fouling of rivers, killing of wild animals, destruction of forests, removal of topsoil, burning up of petroleum and squandering of minerals) and of Space (which included the spoliation of planets, annihilation of alien races, blotting out of civilisations). Belial could do his work by putting two false notions in the minds of men. The first was Progress, the theory that you can gain in one field without paying in another, that history has a 'meaning' and that any fool can understand it, that the ends always justify the means. The second was Nationalism, but of an extended kind, the theory that the State you happen to belong to (whether based on a 'nation' or some other human agglomeration) is the only true god, that every conflict over prestige, power or money is a crusade for the Good, the True or the Beautiful. Terrestrial civilisations had produced noble things but Belial saw to it that they only borrowed the worst from each other. From the West the East had

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taken nationalism, armaments, movies* and Marxism; from the East the West had taken despotism, superstition and indifference to individual life.

Our knowledge of what actually happened in 2005 is fragmentary because destruction was so widespread. We know how Knox's maniacs started the slaughter. Other information reaches us from a most unexpected quarter. It is known now that frequent attempts had been made to visit Earth by beings from other planets, but only once had they succeeded.† Earth was in fact protected by the wicked *eldila* (Vitons) for their own purposes. But in 2005 the Vitons were too much occupied with other matters to maintain their guard, and an expedition (from an unknown planet) managed to slip through, after several failures. Arriving shortly after the end of the war they assumed that the planet was dead and all its inhabitants destroyed. (They were, of course, dispersed or living underground.) The aliens made one landing, and carried away a box containing a diary, a dictionary and a volume of Shakespeare, an English or German poet—his origins have never been established. They returned once more, to drop a special edition of the diary for the edification of the survivors, if any. It was in this remarkable way that we know something about how groups of men and women in various parts of the world protected themselves against the catastrophe they knew was coming.

This edition of John Smith's diary has not survived but a recession of it by J. Jefferson Farjeon, which he calls *Death of a World*, has preserved the text. We read how Benjamin Harsh, founder of Harsh Enterprises, who had risen from poverty to become perhaps the richest man in the world, was 'killed' in a plane crash. It was, in fact, his way of staging a disappearance, for he foresaw the coming catastrophe and wished to plan a method of survival which would not be hindered by publicity. He caused thirty underground sanctuaries to be built in various

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† That is, in force. Leslie and Adamski gave irrefutable evidence in *Flying Saucers Have Landed* that individual space-ships from another planet had landed on Earth. It is not so certain that these ships came from Venus, as Adamski believed. See chapter 8.

parts of the world, where it would be possible for life to continue until conditions on the surface could support it again. He invited large numbers of carefully selected people of all the essential trades and professions to meet at these refuges on a particular day. They had been sworn to secrecy and understood that they would not be allowed to return to the outer world once the choice had been made and implemented. Smith, by a series of accidents, found his way into one of these retreats, although he had not been selected. This particular refuge was in a disused Welsh mine.

Harsh was, in an unofficial capacity, the greatest statesman of his age. Although he showed no signs of being more enlightened than the normal run of politician, he possessed the capacity to act upon his deductions. He believed that the rulers of Earth, World Staters as well as oligarchs, had failed in three essential tasks. They had failed to create an international army.* They had failed to control the new forms of scientific attack and mass destruction. They had failed to alter human nature by lessening man's innate selfishness or bridging the ideological gaps that separated them. Against these failures stood man's astonishing inventiveness in the field of destruction. He now possessed thousands of atom and hydrogen bombs, each one capable of killing a million people (the death zone was 40 sq. kms.), stored in secret arsenals. They could be dropped from the air or released from the ground, with a range of at least 6,500 kms. They had a disease spray, a small glass tube of which contained sufficient germs to spread disease over an area the size of England. This was the germ that carried synthetic glanders. It also sterilised land and poisoned water supplies. Cities could be scorched out by the refraction and intensification of sunlight. Electrical storms could be created on a vast scale, with enormous consequent disorganisation of services.

Harsh's plan was defensive and scarcely creative at all, but no one else had anything better to offer. Humanity, despite its fecundity and ingenuity, had come to the end of a blind alley.

* It is this criticism that leads me to doubt the quality of Harsh's reasoning. An international army could be as great a power for evil as for good. It is surprising that, with the example of I.A.A. before him, he failed to recognise this.

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It could see no alternative but to blast its way out. Harsh gave six thousand people (two hundred in each shelter) the opportunity to reconstruct society. They were prepared for a ten-year siege. Although actual hostilities lasted less than a year, there would still be radioactivity, poison gases and virulent bacteria to combat. The moment Harsh chose to seal the Chosen People away was on the eve of Chen Koo-Sin's attack on Europe, of which he had prior notice. Chen was one of the Eastasian leaders who had secretly made a pact with the Chinese nationalists, who in turn had agreed to support the Poles and Italians and Knox's air-fleet in their bid for power. But in view of what happened these details, which seemed of such vast importance at the time, are scarcely worth recording.

Wireless communication failed early in the struggle. Six alternative methods of communication had been arranged, but all broke down and the inmates of the shelter were completely isolated. The last radio message that they received was that Drinkwater was ninety-three not out in the Test, a reference which appeared to have puzzled Farjeon, but which must surely have been an allusion to the chief scientist working on the giant H-bomb which we know (from Duncan) was made at about that time. The inhabitants of this particular shelter remained in complete ignorance of what was happening on the surface. We have to go to Huxley to learn that panic, if nothing else, had dissipated the populations of New York, Philadelphia, Paris, Tokyo and Bombay. Huxley claims that the 'psychological treatment', conducted by short-wave broadcasts and newspaper headlines, was responsible for as much destruction as the more obvious bombs and bacteria. People trampled each other to death, scattered into the countryside and then, apart from any bacteriological warfare, contracted typhoid, diphtheria and venereal disease. Those who escaped were liable to be shot by farmers, police, State Guards and Vigilantes. Belial's most efficient weapon was fear.

More interesting than the course of the military struggle, dreary and confused as it was, is the behaviour of the remnant of humanity sealed up like hope in a bottle. On the whole, there were two main lines of response to the situation. Some

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accepted Harsh's analysis and plan of action unquestioningly, others immediately rejected it (though they were not allowed to leave the shelter). These were tortured by one of humanity's oddest compulsions, a desire to help the damned and be damned themselves in the process. (It happened on Mars.) Belial alone knows what they thought they could do to help their fellow-men by going to certain destruction.

It was necessary to seal up the sanctuary to prevent these people making a mad rush for freedom and annihilation (the two always accompanied each other in the late Twentieth and early Twenty-First Centuries). The exits were sprayed with melignite, the invention of a scientist named Deakin, who was among the inhabitants of the shelter. This material hardened into impervious metal, which could be penetrated by no known agent. One emergency exit was ingeniously concealed; its location was known only to the Committee.

I have not space to mention the various attitudes exhibited by the highly cultured people gathered together in this place. I will confine myself to the composer Rodway, who had come because he believed Harsh's scheme was a plan to save culture. (Nothing was further from Harsh's thoughts.) In a statement to Smith, Rodway said:

'My belief was that only culture was in danger of extinction, not the world. The world, in any case, would have seemed the less important part, for a world without culture is best extinct. The world, indeed, was invading culture. It was rotten. Fizz-time music, pictures like architectural nightmares, architecture itself becoming a nightmare, with neither soul nor beauty, pornographic literature, silly films, plays not worth writing nor acting, and all this to a background of incessant wireless, in which every kind of cheapness, save actual indecency, was let loose to lower the taste in every home. And, working against the development of the individual, a lust for mass equality however low the level'.

While Rodway was worrying about culture and Harsh about physical survival, the sanctuary was frequently shaken by tremendous explosions. An unpleasant smell was believed by Deakin to be the aroma of a disease spray, which was somehow percolating below. Next came a continuous droning note, gradually becoming louder. Finally the horrifying truth was

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known—a dematerialising ray had managed to find its way into the refuge, expanding along an irregular path, and before its course was discovered it pulverised a man and a chair. This section was sealed off. Then followed an interesting experiment. A criminal who, like Smith, had found his way into the refuge by accident, was allowed to escape, and the results were watched on a TV screen. He simply disappeared. It was discovered that the smell was of dematerialised dust and the sound that of electricity running free. Thereupon the whole sanctuary was sprayed with melignite.

However, it was unavailing. It is doubtful if anyone survived from this sanctuary. The dematerialising ray moved slowly and we don't know how long it retained its power. It is probable that the inmates of other sanctuaries were more fortunate. Certainly a few million people did survive this conflict, some in sanctuaries, other in deserts and mountains, and large populations in isolated lands such as New Zealand. But now I have sketched in some of the details of this catastrophe it is time for me to reveal its true causes. The credit for discovering the almost incredible truth goes to an American investigator named Bill Graham but, like every other pioneer, he only discovered something that numbers of other people were on the point of finding out. Even simple John Smith, the diarist, wrote: 'Perhaps there is no solution to the riddle of life, and just as the lesser creatures are doomed to prey and be preyed on, so are us greater creatures. . . .' While Smith was speculating beneath the surface, Graham above the surface had unexpectedly come to grips with this riddle.

The first hint of the true nature of the crisis was contained in a sudden epidemic of scientists' deaths. Eighteen eminent scientists died mysteriously in five weeks. (Three would have been a normal figure.) One of these was Bjornsen, a Swede, who made some startling discoveries but died before he could reveal them. Later it was established (and this was largely Graham's work) that he had been able to extend the visible portion of the spectrum far into the infra-red. This revealed the existence of creatures, looking like floating spheres (about one metre in diameter), of pale-blue luminescence. We are

immediately reminded of the colder inhabitants of Mars. Bjornsen called these creatures Vitons and the horrifying truth became known that they were the true Lords of Earth and that men were unknowingly their slaves. From a limited distance a Viton could read a human mind, and destroyed those who challenged his supremacy.

There is no doubt that these Vitons were the wicked *eldila* who acted as the agents of Belial, the bent ruler of Earth. They were constantly experimenting on men, trying to endow them with Viton abilities—just as men trained seals to juggle and parrots to talk. They were responsible for those occasional cases of extra-sensory perception which so much engaged the minds of scientists at that time. Russell (who tells the story in *Sinister Barrier*) even suggested that Vitons were responsible for virgin births. The scientists began to call people endowed with these special powers 'Vitonesque-humanoids.'* It was believed that the famous Kaspar Hauser came from a Viton laboratory. The crew of the *Marie Celeste* and individuals like Benjamin Bathurst, British Ambassador to Vienna, who suddenly vanished on November 25th, 1809, were probably taken to Viton labs just as stray cats, frogs and paupers' bodies went to human labs.† Again we are reminded of Dr Ransom, who said quite specifically that the Tellurian *eldila* were different from those of other planets, in that they were hostile to man or his equivalent.

That, in fact, was why our world was cut off from communication with the other planets. He described us as being in a state of siege, as being, in fact, an enemy-occupied territory, held down by *eldila* who were at war both with us and with the *eldila* of Deep Heaven or 'space'. Like the bacteria on the microscopic level, so these co-habiting pests on the macroscopic level permeate our whole life invisibly and are the real explanation of that fatal bent which is the main lesson of history.‡

Ransom believed that *eldila* of a better kind were trying to establish communication with men. But in 2005 no time could be wasted in waiting for succour. A totally new kind of war was

* They would.

† But Leslie and Adamski attributed their disappearance to less sinister visits by men from other planets.

‡ C. S. Lewis, *Voyage to Venus (Perelandra)*.

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unveiled, a war that had been waged for centuries without human awareness. It was suddenly realised that man's conception of his own history had been utterly false. All the conflicts and struggles of the past had possessed no reality of their own, but had been mere reflections of a war between species. Men's theories of economic determination, imperialist expansion, population movements, racial rivalry, etc., had been merely secondary rationalisations of unknown and unguessed phenomena. It was revealed that the Vitons actually lived on human energy, fattened themselves on currents generated by our emotions. They boosted their harvests by stimulating passions, jealousies and hatreds and by rousing mass conflicts. It was recognised that we, proud men, were 'fleshly soil, sown with Viton-dictated circumstances, sown with controversial ideas, manured with foul rumours, lies and wilful misrepresentations, sprinkled with suspicion and jealousy, all that we may raise fine, fat crops of emotional energy to be reaped with knives of trouble. Every time someone screams for war, a Viton is using his vocal chords to order a Viton banquet'. At last it was understood why, although the enormous majority of men desired peace, they went to war with monotonous regularity—because they were compelled to. They were allowed to progress in every art and science except sociology.

Vitons employed extra-sensory perception as a substitute for sight. They utilised telepathy in lieu of vocal chords and hearing organs. They were believed to be composed of pure energy—neither animal, mineral nor vegetable. The theory was held that fireballs, which had puzzled scientists for so long, were in fact dying Vitons, dispelling energy in suddenly visible frequencies. There was little agreement, however, on the origin of these creatures. Some believed that they were alien invaders of fairly recent origin; others that they were of extra-terrestrial origin but had conquered and occupied the planet thousands of years ago; they might have been natives of Earth, like the microbes; there was even the theory that they were the true Terrestrials, who had at some time in the remote past brought men to Earth in cosmic cattle-boats.

The discovery was first made in Oceania and its dependencies,

and the inescapable fact that faced the people of Oceania was that they were dealing with war on two utterly different levels: against Eastasia and part of Eurasia (now temporarily united in the Asian Combine, with their nationalist and World State allies) and the Vitons. At first it was not even clear how the latter war was to be conducted. When, for instance, a scientist discovered how to photograph Vitons, his laboratory and Silver City, Idaho, were mysteriously blown to bits.

The initiative was now taken by the President of Oceania (presumably one of a line of Big Brothers, or Alphas as they later came to be called). A speech of his was recorded, but the only tangible result was that sixty-four radio stations and numerous newspaper offices, all trying to warn the rest of the world of the crisis that faced mankind, were destroyed by supernatural means. But the news was out. At first the majority of readers and listeners, including newspaper and broadcasting staffs themselves, refused to take the warning seriously or assumed that it was a Government trick to tighten up what was euphemistically known as 'security'. (So it was, but a much more genuine type of security than most people realised.) The authorities were baffled. For once they were ahead of their subjects, but past history had made distrust of all governmental action a natural response. The thing that baffled the authorities most of all was the uncertainty whether public resistance to their version of what was happening was a genuine expression of autonomous views, or had it been implanted by the Vitons? The Vitons had immense power over the human mind. They had manipulated it for centuries.

The progress of the war is only of secondary interest. All that mattered was the immense destruction; how it happened or by which agent can scarcely interest us. We have mentioned Knox's attack on Paris, we have noted the Chinese invasion of Europe, we have watched the Australian continent shattered from a vantage point on Mars. Huxley has written of the effect of panic in the big cities. The catalogue can be continued. The Asians made mass aerial attacks on Seattle, Vancouver and San Francisco. The West claimed desperately that mankind was being driven to destruction by an alien race, but there was no

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sympathy in the East for this point of view. Many Asians believed they were at last coming into their rightful heritage, that the centuries-old dominance of the West was at last being dissipated. Even those Asians who accepted the existence of the Vitons as a fact preferred to recognise them as spirits of their glorious ancestors.

The Asian tide swept on. At last even the doubters realised that more than human agents were at work. Los Angeles was mysteriously destroyed; no atom bombs were dropped, there was no trace of radioactive gases or bacteria. California and the southern half of Oregon was occupied. Fresh forces poured in from Indochina, Malaya, Siam and India. The Asiatic world was on fire with the spirit of revenge. It is doubtful if their rulers could have checked them had they wished, but it is more than likely that at last they saw the opportunity to end the military stalemate of the last thirty years. Only Pakistan and the Arab world stayed aloof. And behind this fearful crusade were the Vitons, urging the destruction of the men who had discovered their secrets, and incidentally banqueting on the emotions, hatreds and jealousies generated by the struggle.

By now, thanks to the work of certain American scientists, the majority of people in the beleaguered West could see the Vitons. But it was no pleasant sight. These creatures attached themselves to the spine and inserted threads of energy through which they sucked the nervous currents. With admirable energy an immense underground city was constructed beneath New York, a hundred times larger than any of Harsh's sanctuaries. Terror mounted as the Vitons began snatching victims and carrying them away. Looking back, it seems almost certain that the Vitons were as fear-stricken as the humans, now that their horrible hegemony was at last being challenged. Their new tactic was to return their victims to Earth with a completely changed mental condition. Horror mounted upon horror as these involuntary quislings began attacking their unaffected fellow-citizens. The Vitons could no more distinguish between human beings than the latter can between sheep. Their surgically-created 'dupes', as they were called, did it for them.

The Asians, who were given preferential treatment as

unconscious allies of the Vitons, now held complete command of the air. This was superbly easy because the Vitons were causing Oceanic airmen to land in enemy territory, and surrender their planes. There was no alternative but to ground all that remained of the Oceanic Air Force. By now large areas of Europe, Asia and North America had been devastated by atomic warfare—not to mention Australia, the nature of whose catastrophe has never been discovered. It was at this stage that full authority was given to Graham, on the grounds that he understood the nature of the Viton menace better than anyone else. (As an investigator he had been largely responsible for rousing the Americans to an awareness of the new danger. The Asians were quite rightly considered of secondary importance.) He conscripted all scientific experts and commandeered all laboratories, industrial plants and lines of communication. The scientists were divided into syndicates and orders were given that all research was to be explained and tapped off by radio, telephone and television.

It was one of these syndicates that finally discovered the best method of combating the Vitons. It was found that they were particularly vulnerable to an extremely low frequency (cf. the bathies) which, when beamed on them, caused them to disintegrate. They turned a dark purple, then a brilliant orange and finally exploded. In despair the Vitons made a mass attack on the transmitters and were obliterated. Suddenly the end was in sight. No sooner had the Vitons been dispersed than their dupes, including the Asians, released from the mysterious influence that had driven them on, began to rebel. The news that finally cheered the West and was the first stage in their salvation was that a group of pacifists in Chungking had begun to manufacture anti-Viton beams.

But what a salvation! The world in ruins, its population decimated, disease and poverty rampant! A vivid picture has been left us by a farmer-poet named Ronald Duncan in a curious document which he called *The Last Adam*. Duncan was in London at the time of its annihilation and to the end believed he was the sole male survivor on Earth. At the same time Walter Gripp on Mars was suffering from a similar delusion.

but with more reason. There had been a mass emigration from Mars. There had been mass destruction on Earth. Yet London had not shared the fate of Paris and New York. To the end London retained its individuality, even its outer shape. By a fantastic accident Duncan had been under an anæsthetic while a super-hydrogen bomb was being tested. He awoke to find himself in a city of the dead, yet completely untouched architecturally. Wandering through its empty streets, horror alternating with wonder, he eventually entered *The Times* building and saw the headlines that explained the catastrophe: OPERATION H: HYDROGEN BOMB TO BE DROPPED TODAY, and beneath it he read the experts' opinion that the possibility of the explosion exhausting the air of oxygen could be dismissed as foolish. He realised that he, perhaps alone, had been saved by his oxygen mask. The only other survivor appeared to be a pelican in St. James's Park.

Duncan's account of a city without men is awe-inspiring. The creations of men outlasted them. Some of them, which moved of their own accord, slowly lost momentum. The underground trains, for instance, were still racing round and round the Inner Circle, with corpses wedged in a rush-hour jam. (It is better not to attempt to imagine the chaos at the termini.) Duncan believed that the Grid System must have been partially fed by power from hydraulic turbines in the Highlands which would continue to work until they wore out. For two days he wandered round London in a daze, feeding at will, and coming to regard corpses as a natural part of the landscape. (It was November, which helped delay putrefaction.) Then he realised that others besides himself might also have survived by the same means—but all the operating theatres were empty. He had been operated on in the lunch-hour, a most unusual time for surgeons. He did find a dozen babies under glass tents with oxygen cylinders beside them, but he was too late. They had died barely an hour ago.

This desolation was strongly reminiscent of Rome in the year A.D. 546, when it was besieged by Totila. Procopius, one of my honourable forebears, tells us that only five hundred citizens remained of the teeming thousands who had made it

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the greatest city in the world. And when Totila withdrew the Eternal City was entirely devoid of inhabitants. For forty days it was 'waste and without inhabitants'. History has a way of repeating itself. But Rome recovered. So did London.

After about a week Duncan was driven out of London by the stench of decomposing bodies. Later he returned, half-maddened by his solitude. Inside him was a compulsion to discover fellow-survivors, whom he knew in his heart must exist. Like Walter Gripp he put his faith in the telephone, but instead of dialling numbers at random he went to the Exchange. He rang up Amsterdam, Rome, New York, Bombay, Melbourne, Madrid and Montreal, but without reply. It seems never to have occurred to him that most of these lines were probably out of order as a result of military action. But at last he was rewarded. A woman's voice, the most beautiful voice that had ever spoken on Earth, answered him from Marseilles. He jumped into a car (he owned far more



Duncan escaping the New Eve

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cars than Ford himself had ever done) and drove to Dover, from where he crossed the Channel in a Customs launch, landing at Dunkirk. There had been a famous evacuation from this port by the British in 1940. Now they were returning.

Down he drove to Marseilles, changing cars like his ancestors used to change horses. And there, in the Exchange, he could have died of disappointment: he found a gramophone tirelessly repeating, 'Ici Marseilles'. Now he felt utterly alone and abandoned. The only people who could possibly have survived were airmen and submarine crews—and probably the airmen had been blown or sucked out of the skies. An even more horrible thought struck him: there would be no women. Duncan was apparently fond of women. And yet in this he was proved wrong. He went on to Italy, loitering in Siena, Florence and Perugia, where some of men's finest creations were spread silently and reprovingly before him. It was off Piombino he met a woman, an American who had been a member of the New England Archaeological Society expedition. She had been under water when the explosion occurred. They both believed they were the only survivors on the planet. But Duncan's hope of an idyllic demise in Paradise, man's history coming full circle, was rudely shattered. The woman was a true child of her time. She immediately began to concern herself with the revival or reproduction of the race. Duncan saw a horrible future stretching ahead of him, the world a stud-farm, himself a prize bull. Sickened, he fled. We do not hear of him again. Nor do we hear of the woman, though it is not unlikely that you, dear reader, are an end-product of her genetic frenzy.*

* * *

The results of this war were far more important than the war

* There are other reports of 'lone survivors'. There were probably enough of these to fill a fair-sized market town. Dean Evans tells us of one in *Not a Creature Was Stirring*. He was a miner who came into Reno for a binge and found it dead. (Reno was a textile centre, famous for its divorce suits.) Wilson Tucker reports another in an unnamed town (*To a Ripe Old Age*). In some cases the disaster created such a shock the legend arose that an alien race had appeared and gobbled up the population. One must be wary of reporting made under such exceptional conditions. Stuart Cloete believed for some years that he was the only survivor from New York, until he was captured by a tribe of Indians and a couple of blondes.

itself. It has remained in the folk memory as the Explosion. The folk memory is delightfully simple, as its only other historical components are the Flood and the Whirlwind. I am sometimes assailed by doubts of my own wisdom in recording these horrific events. Civilisation destroyed itself by its own complexity and the fear creeps over me, especially in the small hours when Katharine has gone to bed, patiently leaving me to my labours, that I am the unknowing agent of a revived Belial and am initiating the progress of evil all over again. But in the clarifying light of day I see that this very doubt is Belial himself stealing into my mind. I have been chosen to provide men with a warning. As I see the simple herdsmen file past my hut on their way to the river I am sometimes gripped by a vision, of one of them idly tampering with the elements and producing cars that run by themselves and projecting pictures from one place to another. Let them at least understand the dangers they run. There is a point to man's agony. The greatest moral crime is to labour in vain.

I have read in strange books that man's self-destruction was a repetition of an earlier folly. Archæologists, anthropologists and geologists convinced themselves that the age of human civilisation (or technical accomplishment, call it what you will) was a minute pimple crowning a massive structure of almost endless effort. They wrote in terms of millions of years and assumed that through all these æons man was crawling from the lowland slime to the peaks of achievement. But the parallel does not hold well, for man's pace quickened as he neared the end—the final weariness of the mountaineer was not experienced. Yet here and there are hints that this climb was not the snail-like process that is normally assumed. It may only have taken five million years instead of fifty. Who knows how many times the climb had been made before, with the same violent end? There are rumours of Atlantis, of celestial cars, of vibrations that made electric power seem like clockwork in comparison. There were ruins whose origins baffled all honest men, as at Zimbabwe. No one ever satisfactorily explained the building methods employed at Baalbek and in Egypt. The archæological writer Murray Leinster has reported the discovery of metal alloys in

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Mexico and the Nile Valley possessing properties absolutely unknown to modern man. Perhaps the whole process of harnessing natural forces had occurred before, with the same end in self-destruction. That is why I believed I had been privileged to warn men before setting out on their next climb. They are too arrogant to discover their own weaknesses. But will they be too arrogant to accept a warning? Will I be dismissed as a carping old fool?

Let me return to Duncan's world. To him it appeared to be at an end. He did not know of the isolated groups of survivors who were scattered all over (and often under) the world's surface. The populations of England and France had been largely wiped out. No more cricket, no more Left Bank. But in East Europe, Asia, America and Africa people still struggled on. Above all, New Zealand was untouched. New Zealand became the platform for recovery. The hegemony of Europe was finished, without question. It is significant that the new bomb whose test had such fatal results was exploded in Europe. This was unusual, and I think it is safe to assume that the explosion took place several miles above the Earth's surface. The future lay with the Antipodes, China and a revived America. The speed of recovery was at first sight astonishing. On reflection it is less so. One of the major problems of society have been over-population. This no longer existed. Teeming millions of slaves and coolies were no longer necessary to undertake the world's work. The survivors included among their number most of the leading scientists who had managed to elude the Vitons. They possessed the knowledge necessary to restore society to a state far superior to what it had enjoyed before. They had the wind and rivers and solar power to work for them. In a very short time men were congratulating themselves on their elimination of human driftwood. They began to talk of their cleverness in reducing human society to a few million men and women, all highly skilled, as though they had planned it.

Recovery was by no means equally distributed, however. This was partly due to the incidence of radioactivity, partly due to the type of society that had existed before the war. Both New Zealand and Equatorial Africa had escaped the radio-active

clouds, and recovery in these areas was correspondingly swift. The California coast of North America, on the other hand, had suffered severely and recovery was further delayed by the brittle nature of the civilisation that had existed there before. In some ways technically advanced beyond the rest of the world, the Californians were less well equipped to withstand the breakdown of their culture than other less advanced people. Aldous Huxley, who describes this society in his *Ape and Essence*, points out that the New Zealanders adapted themselves to the new conditions far more successfully than the Californians because they were an average people with an average civilisation, never seriously weakened by the mass neuroses which tended to cause American society to resemble a pot perpetually on the boil. About three generations after the catastrophe a New Zealand Re-Discovery Expedition to North America reported on conditions, and this report (by a Dr Poole) appears to have come into Huxley's possession by a rather circuitous route. Before the New Zealanders landed near the old city of Los Angeles, Negroes from Central Africa had already worked their way up the Nile and across the Mediterranean to occupy Rome and London, the religious and commercial capitals of the Old World. What the New Zealanders found in California we may assume the Negroes found in Western Europe. We may also assume that reconstruction took place in both areas at roughly the same time.

Los Angeles was an agglomeration of ruins in a waste land. Dunes of sand had drifted across the concrete. The remains of the local population, descendants of previous culture heroes such as Gable and Widmark and Hayworth and Monroe, were busily engaged in digging up the graves of these same ancestors in a search for jewellery. The women wore little aprons marked NO and negative patches on breasts and bottoms. Huxley believed that concupiscence had destroyed this society's morale, and that they had now resorted to negativism as a measure of defence against forces they had released but never learnt to control. The social ideas of this people were a set of relics from their previous civilisation, no longer bearing any relation to reality. They still spoke of the Proletariat, for instance, although

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no machines had survived, except as structures as mysterious as the pyramids. Grave-robbing was the only industry, apart from fishing. The deformity rate was increasing. Radioactivity had produced some odd results. Man was no longer a wooer, for example. The gamma rays had changed the hereditary pattern of man's physical and mental behaviour. Sex had become seasonal, romance had been swallowed up by the œstrus,* the female's chemical compulsion to mate had abolished courtship, chivalry, tenderness and love. It was felt necessary to restrain sex. Agriculture, on the other hand, was impossible. A great number and variety of plant diseases were rampant in the area, due to the deliberate infection of the crops by means of fungus bombs, bacteria-bearing aerosoles and the release of many virus-carrying aphides and other insects.

• Politically these people also lived in the shadow of forms they no longer understood. They called their administrative system democratic and claimed that all were equal before the law. In theory all property belonged to the Proletariat, i.e., the State. It was clear to Dr Poole that society was controlled by an oligarchy and that the workers were kept in subjection, but this did not affect the enthusiasm with which they mouthed these thaumaturgic words. Political fragmentation had been a natural result of technological breakdown. This society of South California was apparently one of many, all of which jealously guarded their independence and separateness (Sovereign Rights was the magic term in this connexion) and viewed each other with suspicion. It was vaguely felt that while South California was a paradise North California was almost certainly an inferno.

In a few years a way of life had been violently reversed. Poole saw women in the centre of the old city drawing water from a well in a goatskin, and emptying it into an earthenware jar. He saw an ox carcase, hung from a bar slung between two lamp-posts, being roasted over a fire maintained with volumes from the Public Library. After all, the workers could only read one word, which was NO, and which had already attained a mystical pre-eminence over all other words, comparable with

* Violent sexual desire, or frenzy.

that of OM in an earlier civilisation. There were women weaving on primitive looms such as those previously used by the Indians of Central America. Drinking cups had been made out of skulls, knitting needles from ulnas, flutes and recorders from the longer shank-bones. What had euphemistically been called Defence had now reverted to bows and arrows, with which the New Zealand Expedition was dutifully attacked.

The most important development (more accurately a regression) had taken place in religion, which now approximated closely to political and social ideology. It had been characteristic of many liberal societies that religious morality had contradicted and acted as a brake on political and social practice. In California the Heads of Church and State co-operated closely and consciously. It was claimed that every proletarian enjoyed perfect freedom and freely carried out the will of his class, the Proletariat (now equated with the whole people). The unity of religious and social experience was expressed by the formula: vox proletarius, vox Diaboli, vox Ecclesiæ. (Note the supersession of vox Dei, which I will elaborate later.) Disobedience of either Church or Proletariat was equally condemned, and the punishment for both was identical: lashes with a bull's pizzle.

The Californians had lost all faith in the God worshipped (or acknowledged) by their ancestors. There was considerable logic in the position they had adopted. They argued that the God of Love had deserted them. This, of course, was a highly doubtful proposition—it might equally be asserted that Man had deserted the God of Love. But given this premise, it was perfectly natural that they should reject God and turn to His enemy, Belial. Recent theological discoveries (particularly those resulting from the visits of Dr Ransom to Mars and Venus*) had made it clear to the Californians that Belial wielded immense power on this planet, and their action in accepting his rule was simply a surrender to what they deemed the Almighty. Unfortunately we have not sufficient evidence to give a comprehensive account of this new theology, to state whether Belial was one of God's creatures in successful revolt, or whether they believed that God was a figment of the imagin-

* Dr Ransom's visit to Venus will be referred to briefly in chapter 8.

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ation and did not exist, or whether they adopted a Manichæan position in which Belial was co-existent in eternity with God. The most likely theory is that Belial had originally been subject to God's will but had now thrown off his overlordship. There is no doubt that, according to the Californians, Belial had taken control of all human affairs and had manipulated the war to give himself victory over humanity. It had often been stated in the Twentieth Century that no one won a modern war. It was now felt that Belial had set man against man, Man against Viton, and alone benefited from the disaster.

There were doubtless many societies of this kind after the war had petered out, but we know more about this one than any of the others, thanks to the survival of the Shorter Catechism used in the worship of Belial. The opening phrases set the tone of society. 'What is the chief end of Man? The chief end of Man is to propitiate Belial, deprecate His enmity and avoid destruction for as long as possible'. The boys and girls were led in catechism by the Satanic Science Practitioner: 'To what fate is Man predestined? Belial has, out of His mere good pleasure, from all eternity elected all now living to everlasting perdition'. Again: 'Belial has perverted and corrupted us in all the parts of our being. Therefore we are, merely on account of that corruption, deservedly condemned by Belial'.

The new morality was thoroughly consistent with the theology, which is rare in human history. 'My duty towards my neighbour is to do my best to prevent him from doing unto me what I should like to do unto him; to subject myself to all my governors; to keep my body in absolute chastity, except during the two weeks following Belial Day; and to do my duty in that state of life to which it hath pleased Belial to condemn me'. There are many echoes of the old Christian Churches in the new dispensation. 'The Church is the body of which Belial is the head and all possessed people are the members'. The Head of the Church was His Eminence the Arch-Vicar of Belial, Lord of the Earth, Primate of California, Servant of the Proletariat, Bishop of Hollywood.* All priests were eunuchs.

* The reference is obscure. It possibly served as a link with the earlier religion. Holy Wood had been the scene of sacred ritual dramas.

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One of the major religious events of the year was the Purification Ceremony, when shaven girls and women who had given birth to monsters were herded into the Los Angeles Coliseum, which was lit by torches. Patriarchs and Archimandrites, Presbyters and Postulants, chanted antiphonally to the music of bone recorders and xylophones:

'Glory to Belial, to Belial in the lowest!' They invoked the Princes of the Powers of the Air:

'Spitfire and Stuka, Beelzebub and Azazel, Hallelujah!' The mothers were dragged to the steps where the Patriarch of Pasadena impaled the monsters with a knife:

'How shall Belial be propitiated? Only by blood!' And the congregation chanted 'Blood, blood, blood' monotonously.

We might be tempted to pity these people but it is doubtful if they pitied themselves. Their worship of evil, their concentration on blood, their horror of sex, their repression of women, their cruelty to the malformed—it seemed to contradict the principles of Christianity, yet in many cases they were preaching what the Christians had often practised. The Christians had also been fascinated by the Blood of the Lamb and had frequently sought fresh outpourings of blood in martyrdom and crusades; many of them had loathed sex and secretly regarded women as enemies of man's salvation. And if we care to go back beyond Christianity to the religion of the Canaanites (to take one example only) we will find the same things enjoyed for their own sakes. Terror the inherent principle, bloodstained rites and gloomy imagery. When we consider the abstinences, the voluntary submission to torture and, above all, the horrible sacrifices imposed on the living, we no longer wonder that they envied the repose of the dead. Belial was Baal-Ashtoreth Redivivus. Men were entering upon another stage of a familiar cycle, bowing to the evil they saw everywhere victorious, longing to propitiate the Devil now that God was powerless. And how else could the Devil be propitiated but by the annihilation of what had once been considered virtue?

Belial-worship was in fact a quite overt development of Christianity, physically as well as theologically. The old churches were still used for worship, when still standing, with

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very few alterations. For example, in the Church of Our Lady of Guadeloupe (renamed St Azazel's) the plaster figures of St Joseph, the Magdalen, St Anthony of Padua and St Rose of Lima had been merely painted red and fitted with horns. On the High Altar nothing had been changed except that the crucifix had been replaced by enormous horns which were hung with rings, wrist-watches and bracelets. Worshippers made the sign of the horns. Church and State worked together as amicably as ever. Two weeks after the Purification men and women were reissued with their aprons and patches by the Archimandrite in charge of the Public Morals, and were assigned work by the Grand Inquisitor's Chief Assistant in charge of Public Works. Indeed, little effort was made to keep the two institutions separate. The need for prudence that had hindered the co-operation of the earlier Churches and States no longer existed. Anyone who felt inclined to resist such collusion as evil was compelled by that very reason to accept it. And there would be little mercy shown to anyone who dared to resist evil. The old God was called the Order of Things. Men had revolted against it and now, with the help of Belial, were imposing their own desperate order.

I have referred many times in passing to the position of women and the existence of monsters. There was doubtless a theory of Original Perfection which dominated the thought of the Californians. They referred to women as (to quote the Shorter Catechism) 'vessels of the Unholy Spirit, the source of all deformity, the enemy of the race, punished by Belial and calling down punishment on all those who succumb to Belial in her'. Hence the emblem of denial, the ubiquitous NO. Women (widely known as Vessels) produced Malicious Animal Magnetism. There is considerable inconsistency in these beliefs, but religious inconsistency was not a new factor. It is probably safe to infer that even the Californians acknowledged a limit to the desirability of evil. Women were almost taboo for two reasons. They were held responsible for the prevalent concupiscence which it was believed was at bottom the cause of the late disaster, and they had produced the monsters. These monsters (actually the products of gamma rays) were a major problem

in post-war society.* Freaks were liquidated and their mothers had their heads shaved. But freakishness was so widespread certain limits had to be accepted, e.g., up to three nipples and seven toes or fingers were allowed.†

Sexual behaviour was therefore more rigidly controlled than any other field of activity. After Purification men and women were allowed to copulate in the arena. Various influences, radioactive and guilt-psychotic, had reduced desire in a normal person to five weeks in the year, but only two weeks of actual mating were allowed. There was a minority of between five and ten per cent (called Hots) who wished to do it at other times, but they were severely punished if caught. These Hots were used as social scapegoats, as external enemies were few and the Jews apparently forgotten. Some Hots retired to a special community near Fresno (eighty-five per cent Hot) but it was dangerous, for if they were caught they were buried alive. A bright boy who gave signs of being a Hot was made a priest. It was felt that only in this way could another sexually motivated cataclysm be avoided. The Arch-Vicar's benediction, 'Belial's curse be on you', was required for all legal mating. Love was forbidden—indeed, it was practically extinct for physiological reasons—yet it persisted in a few. This was not new, of course—Orwell has told us of the subterfuges necessary for the enjoyment of love as early as 1984. Then members of the Outer Party had stolen guiltily into the country; now they crept into ruined buildings and made love in ancient Super de Luxe Four-Door Chevrolet Sedans,‡ watched by skulls.

It is unlikely that all the communities that survived the Fourth World War (always excluding the New Zealanders and Equatorial Africans, who had maintained quite a high level of

* We learn from Stuart Cloete that both animal and plant life suffered from mutations. Giant wolves, standing as high as a horse, and immense brown and white minks which attacked cattle and sucked their blood in a few minutes, appeared. Some ferns grew as big as trees and a new species of elm crept along the ground, one tree covering as much as an acre (*The Blast*).

† I feel my labours have been justified by this discovery alone. It had always puzzled me why my Aunt Hyacinth had had three nipples and my Uncle Joe two navels. Gamma rays have a fertile progeny.

‡ Sedan was a battle. Presumably this was a war-weapon first used there. Perhaps a gun-carriage?

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civilisation) sank to such depths as this. These men had nearly destroyed themselves but, unlike their ancestors, they appeared to have no sense of penitence. They believed that there had been a struggle between deities, and Belial had won. They had 'backed the wrong horse'* and now transferred to a better one. This required a reversal of values, which they did willingly enough. They were quite prepared to return to the kind of society that had produced the calamity, because in their opinion the society had not been responsible. Belial alone was responsible, working through sex, which was irresistible. Hence the control, assisted by the fortuitous action of gamma rays. This was a very different mood from that of the later Sophocrats, who admitted their own spiritual bankruptcy and could see no other solution than a completely fresh start. But nearly a thousand years separated the Californian Belialists from the Sophocrats, and man had not yet reached the peak of his idiocy. It is now time to examine the steps by which he tried to solve his problems, increasingly social, and the disasters he endured on the way.†

* Ridden (sat on the back of) a horse that had gone lame.

† There is not sufficient space to refer to all the theories of man's place in the world that flourished at this time, but I should like to mention in passing the Lemming Theory. This was evolved by a statistician named Breen, who believed that men were completely at the mercy of unknown forces and urges. Catastrophe, according to this theory, implied the synchronisation of many quite adventitious developments. Breen discovered the existence of recurring cycles, and plotted the movements of Mississippi River floods, fur catches in Canada, stock market prices, marriages, epidemics, freight car loadings, bank clearings, locust plagues, divorce, tree growth, wars, rainfall, Earth magnetism, building construction, patents applied for, murders. He called Year 2005 The Year of the Jackpot. The Earth was a fruit machine, and everything came tumbling out in that year. (Robert A. Heinlein was the acknowledged expert in this field of electronics.)

Calamity Piled on Calamity

AFTER THE FOURTH WORLD WAR the writing of history virtually stopped. There was a mass of officially inspired volumes on space exploration. There was a vast amount of documentation on various aspects of society. If I had the time it would be possible to search out the strands that make a connected history possible. But even if I were able to do this I have grave doubts of its value. In a sense society had reached a point where it marked time for several centuries and then started on a gradual decline. It is the rise and the fall that are interesting. There is no profit to be derived from stagnation. Just as the religious dominance in human affairs ended somewhere about the end of the Seventeenth Century, so political dominance ended about the end of the Twentieth Century. Thereafter men did not fight and debate about political matters. Their first task after the war was reconstruction. This they effected in a remarkably brief space of time, partly because the techniques and technicians had been carefully preserved, partly because the world was no longer embarrassed by enormous populations. Technicians had never been very interested in political niceties. They believed efficiency was the highest good and the only government they considered worth having was one that would allow them to establish social efficiency. Now that they were in the ascendency, through their numbers and society's pressing need of them, it was a simple matter to set up the government they wanted. It was the dawn of Technocracy. The new rulers could see no value in history and very little in the arts. They recognised that every society must have its mythology, and so they fostered a popularised and simplified

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version of the past. A few individuals protested and no doubt they were suitably disposed of. There were occasional outcrops of libertarian sentiment, but to the new technocratic ruler they were the remnants of a primitivism that should have been dispelled long ago. The only political argument they indulged in went something like this: you have food, clothing, shelter, fast transport, drugs and entertainment—what further good do you expect liberty to bring you? From the technocratic point of view it would bring no good, only the probability of breakdown, inefficiency and chaos.

I will anticipate the later stages of my narrative in order to give you some idea of the quandary that confronts me. From 2005 until the end of the Thirtieth Century the new society held together, and the vast majority of the population felt comparatively satisfied with their lot (with occasional exceptions). This could only happen because the human race had been largely despiritualised—they were intelligent animals with no conception of any other level of consciousness than the purely rational. But those other attributes which had produced art and a religious outlook, mysticism and the irrational aspect of love had not been entirely dissipated. Slowly, as mere mechanical living produced a variety of frustrations, the older yearnings and aspirations of the human race revived, until men finally realised that they had solved nothing and that a crisis (an old one, if they had but known) faced them. They had tried to solve their problems in the spirit of a man with a sore foot, who thinks he has found a cure by cutting off his leg. I call this period the Space Era, because it was characterised by a frenzied journeying from planet to planet, galaxy to galaxy. In this sense man did not stand still. But his movement was purposeless. He appeared to think (if he thought about it at all, which is doubtful) that whatever heaven he looked for was to be found in space. He had forgotten the simple truth that his simple ancestors had known—that heaven is within us.

Roberto Graves, a Spanish philosopher, called this period more soberly the Late Christian Epoch. But Graves wrote fairly soon after the downfall of the Sophocrats,* and he

* It is just possible that he is still alive.

thought in theological terms, much as St Augustine had done over three thousand years before. It is a charming eccentricity of Graves's that caused him to name a thing after an attribute it lacked. The religion of Belial was but a short phase, an expression of racial insanity that could not last. Thereafter men returned to their view of the God that was Good and the Redeemer Jesus Christ. But these were too often empty forms which must have annoyed and saddened Christ in Heaven.

This period upon which I am embarking was not as eventless as I may have suggested. But the events were rarely political. They were landmarks in the struggle with Nature which many men, it is certain, believed had already ended in man's victory. But Nature had various tricks up her sleeve,* some of them emphasised by man's successes. When we start this period, for instance, large parts of the world had relapsed into barbarism. I intend to devote this chapter to a consideration of some of the calamities which overcame sections of the human race at certain times, though never all sections at the same time, thus allowing recovery to be initiated by those who were not affected.

I can best start by recording a pathetic picture left by a random observer of an advanced civilisation in ruins. The major problem after the Fourth World War was the existence of radioactive clouds. We have seen the effect they had on the people of California. For some years the province was uninhabitable. The Belial worshippers were apparently descendants of people who had fled from the contaminated area and then returned. We can imagine these people fleeing before the new scourge, never knowing when or where they might run into invisible agents of death or mutilation. Wherever there are men there will be observers, even if the last thing they do is to record their observations. One of these wretches wrote wonderingly of an area in which only one house remained standing. The ruined city gave off a radioactive glow. The entire west face of the house had been blackened except for five silhouettes—a man mowing the lawn, a woman picking flowers, a small boy with his hands in the air, a ball, a girl preparing to catch. The

* I think this phrase worth preserving though I have no idea of its origin.

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end came suddenly. The new methods of destruction provided their own murals. They were more innocent than Pompeii's.

I wonder when these people felt that life was no longer worth living? Probably long before they felt the burns on their flesh. Perhaps when the television set fused or the refrigerator ceased to make ice. It had all happened before. When the Goths laid siege to Rome the townsmen felt secure behind their great general Belisarius. Then the barbarians put the aqueducts out of action. The citizens of Rome could no longer take their daily baths and there were murmurings against Belisarius. War had ceased to be an interesting occupation.

Belial triumphed in California. Elsewhere it was Nature. Man's capitulation was more complete yet less hopeless. Nature had had the advantage before and men knew she was tameable, but the powers of Belial were quite unknown. The reversion to the wilderness was complete in England, and is described by Richard Jefferies in *After London*. Our knowledge of the catastrophe in the tight little isle is very fragmentary. Duncan tells us that London and the South-East were quite deserted. We know from Farjeon that an attempt to establish a sanctuary in Wales failed, but there may have been others that were more successful. Apart from that, we have to jump to Jefferies, writing about a generation after the war, to find that a small population still exists, but it is one that has reverted entirely to primitivism. Radioactivity does not appear to have been so deadly in England as in California. The collapse of society had been comparable, however, though less ugly in character. The old Conservative tradition outlived Party headquarters.

According to Jefferies, green vegetation soon covered the whole country, even the sites of the old towns and cities. The original crops of wheat, barley, oats and beans came up year after year, but were slowly choked by coarser plants, such as nettles and wild parsnips. Aquatic grasses came up the meadows and brambles spread from the hedges. After about twenty years the brambles and the briars met in the centre of the fields—i.e., twenty years after the Presidential Council had lunched in Trafalgar Square. Ten years after this date there were no open spaces, except on the hills. The ditches were blocked, the water

TOMORROW REVEALED

stagnated and formed marshes. Some of the rivers flooded and after the rains they carried away their bridges and completely covered many villages and towns with silt. Trees began to march up the hills and formed a stunted kind of forest. This was the England discovered by the Negroes of Equatorial Africa after they had passed through Italy and France.* There is no doubt in my mind that the condition of England (believed by some to be Zion) fulfilled a prophecy by a man named Isaiah:

And thorns shall come up in her palaces, nettles and thistles in the fortresses thereof: and it shall be a habitation for jackals, a court for ostriches.† And the wild beasts of the desert shall meet with the wolves, and the satyr shall cry to his fellow; yea, the night-monster shall settle there and find her a place of rest.

Whatever we may understand by the night-monster, we know that mice swarmed to an incredible degree, devouring grain or straw that had never been cut and cleaning out every ear in the wheat-ricks. The human survivors tried to raise crops in small gardens but the mice rushed in and destroyed everything. This is the kind of situation that Nature can best deal with herself, for the plague of mice led in a very short time to a vast increase in the number of kestrel hawks, owls and weasels. Cats also ran wild and fed on mice, but they were a menace to fowls and poultry besides. Armies of rats caused a brief spell of terror, but they were promptly dealt with by the cats and dogs. Three main types of dog ran wild. The most formidable of these were the descendants of the ancient sheep dogs, which hunted in packs of ten or more (as many as forty had been counted) and killed and mangled sheep. They were even known to attack cattle, horses and deer. Of the animals that escaped from menageries and zoos only the beaver and some aquatic birds survived. (Thus Jefferies: as I have hinted, I believe the ostrich was another. It may, of course, have died out at a later date.)‡

* There is a theory that Jefferies himself was a Negro settler in Wiltshire.

† Escaped from the zoos, of course.

‡ In parts of America the wild life became abundant. (Timber wolf, beaver, black bear, lynx, mountain lion, deer, moose, bobcat, even bison and caribou, swarmed into New York State. A new kind of jungle forest evolved from ordinary poultry. A lunatic opened every cage in Central Park Zoo and these wild animals appeared to have fared better there than in England. Even polar bears lived along the Hudson and East Rivers (Stuart Cloete).

CALAMITY PILED ON CALAMITY

Jefferies' knowledge of what had happened was very vague. He knew that the sea had silted up the various ports but he knew nothing of the sequence of events that had allowed this to happen. There was a strong tradition of an exodus to the South—in all probability, to the uncontaminated areas of Africa and New Zealand. The descendants of those who remained had already forgotten what had caused the catastrophe. In fact, Jefferies himself favoured a wonderful theory about the attractive power of some immense body in space which had tilted the Earth and altered the flow of magnetic currents that influence the minds of men. There was extreme reluctance to admit human responsibility for what had happened.

The wealthy, powerful and educated had escaped. England had become a native reserve, in which the poorer, half-educated section of the population lived in primitive innocence. Technically they had been thrown back centuries. They no longer had sufficient knowledge or skill to use even the antiquated railway system which still veined the country like a net, but tore up the rails and smelted them for other purposes. The country divided naturally into provinces, where the people lived in enclosures and practised small-scale agriculture. There were various types of community. The lowest in the scale of civilisation were the Bushmen, who moved from place to place, were rarely seen, and lived by hunting. When driven by hunger they would sometimes attack the enclosures. Their organisation was very primitive. A 'camp' consisted of from ten to fifty individuals, governed by the eldest male. The number of Gipsies (also known as Romany and Zingari) had increased. There were many tribes, each governed by a king, queen or duke, holding supreme authority. They also moved from place to place, but they had their own districts with a central camp, protected by stockades. They practised a certain amount of agriculture. Women did all the work. The vendetta had been restored as a social institution, and there was permanent war with the Bushmen. Only once had they been known to attack the town-dwellers, and that had been a marked failure.

The remainder of the population, living a more settled life and retaining a higher standard of civilisation, had divided

themselves into provinces, kingdoms and republics. The most advanced clustered round the great lake that had formed in central England. Intercourse was restricted, especially with the West and North. The difficulties of communication were intensified by fines and dues levied on travellers and merchants, and a complicated passport system. (In general, the more backward a State was in the Twentieth and Twenty-First Centuries, the more insistent it was on forms, papers, documents, certificates, etc., as proof of their enlightenment. It could only happen in countries where writing possessed a magical glamour.) These societies were corrupt, and slavery and bribery flourished. Only the nobles and merchants could read and write. They employed Welsh, Irish and Scottish mercenaries, at first for self-defence, but later they became the real masters. The Welsh, calling themselves the Cymry, claimed the country by inheritance and pushed their control up to Sypolis (Oxford), thus dominating most of the South-West. The Irish, based on Chester, pushed South and East as far as Luton, proclaiming themselves the agents of divine vengeance. The advance of these two races was only checked by their own rivalry. The Scots occupied Northumbria and held Highland Games at Whitley Bay. But they were prevented from further progress by the powerful Irish in the South.

The most important feature of this new England, in many ways so like the old Heptarchy, was the lake that extended from the Red Rocks (apparently near the site of Bristol, at the mouth of the Severn) to somewhere near London. It was divided into two unequal portions by the straits of the White Horse, though there were connected by a narrow channel. The lake was tideless. It had formed when the Thames became obstructed by timber and wreckage, the water flowed into the streets of the towns, burst the underground passages and drains and caused the houses to fall in. The river now became completely choked and was turned back. London itself became a vast stagnant swamp, with gases from cloacæ making it impossible for life to exist. All these old dwelling places were now avoided because of the risk of fever. Meanwhile the waters began to spread over the dry land until the lake, averaging twenty miles across, took

shape. At the other end the sandbanks by the Red Rocks blocked up the Severn and Avon, thus cutting the lake off from the sea except at high tide, when the seawater flowed over the bar and mingled with the lakewater. This lake became one of the chief means of communication, the Irish navigating large vessels previously used for oceanic trade, the Welsh sailing in small, easily manœuvrable boats which they salvaged from the old Thames-side towns.

The English States were superficially united in a Holy League, which held a joint Assembly, but they were much too quarrelsome for it to be effective. Only the memory of Christianity remained. As in California, a new religion temporarily took control of men's minds, but in England the change was less sinister and also less sophisticated. The new god was Gold, which was worshipped quite frankly as a metal with supernatural properties. Christianity was kept alive, ready for the next flowering (although a freakish one), by a few devout old men and women, who practised their faith in ruined chapels with the help of rare pastors and occasional manuscripts.

It was very much like California in some ways, very unlike in others. In England there had been regression of the traditional kind. In California one feels society had slipped its groove and was running through totally new fields of experience. The Californians were more shocked by the disaster that had overtaken them and adopted more revolutionary tactics to come to terms with it. The English still remained English underneath their sheepskins, while the Californians might, for all we know, have been the victims of Viton infusions. The New Zealand Expedition discovered a society utterly isolated, physically and spiritually, concentrating all its power on the propitiation of Belial. In England, before the Negroes ever reached it, the old European curiosity was already reasserting itself. A young noble, Sir Felix Aquila, set out to explore the eastern end of the lake. He found a dead world, with no vegetation, no animal life, not even any insects. The ground looked as if it had been burnt. He did not realise that this was the result of radio-activity, nor would he have known what that meant. But in addition to the familiar hazards of the war, this area had

suffered more than any other because of the gaseous emanations from the dead Metropolis.

On this journey Sir Felix was puzzled by certain phenomena which we can explain immediately. 'Ghastly beings haunted the site of so many crimes, shapeless monsters, hovering by night, and weaving a fearful dance. Frequently they caught fire, as it seemed, and burned as they flew or floated in the air'. Here we obviously have a few remaining Vitons, like man also existing in some primitive state, their chief sources of supply cut off, dying slowly of hunger and frustration. Sir Felix also saw fiery vapours running over the surface of the land and sea, sometimes contracting into a ball, as large as the full moon, which rose and then unwound in fiery threads. The hunter and his victim were expiring together, each ignorant of the other's nature.

Mankind only just managed to win through this crisis. He had very nearly committed suicide, although one's judgment is softened when one learns about the Vitons. On other occasions man nearly succumbed. These differed from the one I have just described because they were straight fights between man and another species, with none of the internecine conflicts that made the Fourth World War such a tragic affair. Unfortunately it is not possible to date these other events with any accuracy. By the time they occurred man had lost his historical sense and the past tended to kaleidoscope into a mass of impressions which took on the character of mythology.

Let us first examine one of these catastrophes in what small detail is possible, and leave speculation to later. Our authority is George R. Stewart who left an account of what he certainly believed to be the collapse of civilisation in *Earth Abides*. Stewart believed that the population was controlled by a law of flux and reflux, by which it periodically reached a climax and was then reduced by war or plague. This law affected all species. As an example, the African buffalo reached its climax at the end of the Nineteenth Century, then was struck by rinderpest until it became a curiosity, whereupon it started to increase again. Stewart believed that the human population had been increasing rapidly, and was due for a decline for biological

reasons. In my present state of knowledge^{*} this seems most unlikely. The population probably had been increasing rapidly but it could not have even approached the proportions it attained in the year A.D. 2000. But Stewart was handicapped by the scarcity of information about the past and the prevalence of the new obscurantist mythology. By his time it is likely that the movement known as the Burning of the Books^{*} had encompassed all except technical literature and official legend.

Whatever the reasons, a fatal disease struck the human population of North America and spread with unparalleled rapidity. In a very short time it was estimated that between twenty-five per cent and thirty-five per cent of the city populations had died. Stewart was astonished by the speed at which the virus travelled. As men had come to pride themselves on their medical and biological knowledge, they were humiliated by their failure to control the disease—a failure which they had always stigmatised as 'ædiæval'.[†] The facts were that the normal methods of quarantine were quite insufficient to cope with the speed of movement in the modern world.[‡] With passenger transport far exceeding the speed of sound it was impossible to broadcast warning of an epidemic quickly enough. The virus was assumed to be airborne, and was probably carried on particles of dust.[§] The isolation of the individual was of no avail. The only animals to be affected were apes and monkeys. Three theories have been adduced to explain the origin of the epidemic. It might have emerged from some animal reservoir of disease. It might have been caused by some new micro-organism, perhaps a virus produced by mutation. But the popular view was that it had escaped (possibly by vindictive agency) from a laboratory of bacteriological warfare.

Stewart describes how a man named Isherwood Williams drove across North America and found only a few survivors, living singly or in couples, and usually content to stay where

^{*} See chapter 3.

[†] A term of reproach, rather indecent.

[‡] From the Eighteenth Century onwards each generation has called itself 'modern'.

[§] As early as 1930 the inauguration of the Africa-Brazil air service was quickly followed by the entry into South America of the most virulent type of malarial mosquito.

they were. After the disaster came what Stewart called the Secondary Kill—suicide, imbecility and sex-murder. As man lost control, so Nature reasserted herself. Wild dogs and hordes of ants became a menace for a while, but soon found a new equilibrium. The ants, for example, soon returned to their normal numbers—they had probably exhausted the supplies of food which had led to their vast increase. (The rat population suffered a similar fluctuation.) Throughout his narrative Stewart assumed that the disaster was world-wide. This was certainly not the case. It is much more likely that America was quarantined on a continental scale, and that the rest of the world continued its normal routines.

The most interesting aspect of this disaster lies in the technical breakdown which it involved. Parts of man's civilisation continued to function for considerable periods long after man's control and care had been removed. The best example was the electrical supply, when water-generated—for the steam-driven generators naturally came to an end pretty quickly.

The water would continue to flow; the great generators could spin upon their oil-bathed bearings for years. But the flaw lay in the governors which controlled the generators. No one had ever bothered to make them wholly automatic. Once every ten days they were inspected for oil; once a month, perhaps, there was need to add oil to them. After two months without care the oil supplies grew low, and one by one, as the weeks passed, the generators began to go out of action. When one failed, automatically the great water nozzle changed angle and the water flowed through without touching the wheel. Then the generator ceased revolving, and sent out no more power. As generator after generator was thus cut out of the system, the strain upon the few remaining ones became greater and greater, and the decline of the system became cumulative.

It was the same with all the other techniques and gadgets that had served man. There were automobiles in abundance but only limited stocks of gas. Batteries would not remain effective for long unless the means of charging them were retained. The few who survived simply did not have the knowledge required for the efficient functioning of a machine-based society. Perhaps Williams and his colleagues were not a repre-

sentative sample of the North American people. They lived near San Francisco (back in the Belial country, which seemed to invite disaster) and when they grouped together in an effort to reconstruct some form of civilisation they were actually reverting quite naturally to man's most primitive social form: the tribe. At first it seemed impossible that they should survive. Forest fires raged all around them: there was no fire-fighting organisation to combat them. There were plagues of wild cattle and grasshoppers, but no cowboys or pest control. Yet in the face of all this babies were born. Becoming more self-conscious they started a new calendar, calling the year of the disaster Year One. They experimented with religion, feeling a vague sense of responsibility, but after composing a composite service they dropped it and substituted individual worship when they felt the compulsion. Health was remarkably good—only two diseases remained active; one was something like measles, the other was a sore throat. They practised polygamy but not on principle. Expedience ruled their lives. They frowned on promiscuity. Each year was given a special name after some outstanding event, e.g., the Year of the Lions, the Year of the Earthquake. Isherwood Williams was accepted as the tribal leader, though his position was never formalised. He was better educated than the rest, and this gave him prestige. He taught the children to read and write, though most of them showed little interest.

This Williams is an interesting figure. He had none of the talents of an Alexander or a Nordenholt (see later), yet accident had placed him in a position of exceptional power and influence. He was an average man, and a great worrier. He was reasonably intelligent but uncreative, a plodder. He had a great sense of responsibility and felt called upon to supply his tribe with guidance, but had no confidence in his own wisdom or abilities. In the old life he might have become head clerk in a small business. (There are hints that he was a college lecturer.) He hadn't the vision to realise that the tribe would find its own way by its own group intuition. He was the kind of man who feels utterly deserted and alone when the directives cease to come from on high. As for providing directives himself, he felt

keenly that he should and realised bitterly that he couldn't. The tribe shortened his name to Ish, which is Hebrew for Man, and perhaps he was as representative a man as was to be found. There seemed to be no Jehovah, which filled Ish with a sense of his own inadequacy. Ish is also short for Ishmael, which means God Heareth. This possibly expressed a pious wish on Ish's part, but if God heard He did not appear to answer. I have also discovered that many generations before Ish Williams searched the skies for inspiration there was a moon goddess called Ishtar. The moon had recovered her power. One by one the lights went out and Ish, all unknowing, had become a priest of Ishtar.*

By the year 21 (The Coming of Age) there were thirty-six in the community: seven older ones, twenty-one of the second generation, seven of the third and one half-wit from the time of the Disaster. Ish became alarmed by the lack of curiosity and perseverance among the children. Their lives were too easy. They lived on the remnants of a rapidly declining technology. Only Ish fully realised that it could not go on for ever. Ish thought his worries were the product of a wisdom which he had inherited from the earlier days, but which was denied to the children. But they were really the seed-bed of psychoses which would probably plague the tribe long after Ish was dead. He was unnecessarily alarmed by the growth of superstition and taboos, being one of those half-educated people who imagine that civilisation dispenses with them and even that a knowledge of their existence implies a destruction of their power. He felt that he was becoming a demi-god with special powers, and resisted it. He was troubled because his tribe had rejected formal religion while a group in Los Angeles were immersed in it, calling themselves People of God and wearing long white gowns. But another group, near Albuquerque, were living a primitive life patterned on that of the old Pueblo Indians.

The tribe's failure to create a satisfactory social pattern was partly due to Ish's intellectualism. He combated the very factors

* Once you start on etymology there is no end. The Lord God told His prophet Hosea he would no longer be Baali (Master) but would become Ishi (Husband). Ish would have done better to have been more Baali.

which might have given the tribe cohesion: In Year 34 there was some dilution, for they made a union with another tribe, calling each other The First Ones and The Others, but Ish's influence remained dominant. When there was intermarriage the children belonged to the father's clan. In time they ceased to number the years—a sign of decadence, for as long as Ish lived the others were depressed by a sense of futility. The young men regarded him as a god because he was so old and because he was an American (in itself an attribute of divinity, they believed) but they did not regard him with any enthusiasm. They lived completely primitive lives, especially after their old homes were burnt down and they resorted to caves. Hunting filled most of their time, and the only mystery in their lives adhered to Ish's hammer, which was a Jupiter's thunderbolt to them. (Characteristically Ish shrunk from this thaumaturgic interpretation.) By the end of his life one emotion filled his mind, frustration at the thought of the University library, which had survived the fire, still standing uselessly. Ish was tortured by the idea of so much knowledge, available yet inaccessible. The young men did not even know that they were ignorant.

It is quite impossible to say exactly when this catastrophe occurred because there is insufficient evidence concerning the level of civilisation preceding the collapse. It must have happened after the New Zealand Re-Discovery of America, and after a period long enough for civilisation to be re-established. In the past such a task would have taken centuries. With the new techniques and the high degree of skill still available in other parts of the world, it probably took no more than fifty years, and perhaps as few as twenty. Personally I place it between the Re-Discovery and the Troubles of the Sleeper. The secret of time travel was known by 2155, at which time the American civilisation must have been flourishing. The epidemic must have struck shortly after that, as we know that by the time of the Sleeper (another uncertain date) America was once again an important centre of world civilisation.

One thing seems quite certain, and that is that the collapse was not nearly as complete in other parts of the world. It is

quite likely that some parts were scarcely affected. The isolation of North America suggests this. In general, this civilisation proved to be extremely tough—tougher than its spiritual resources would allow us to expect. So long as at least one area of advanced technical standard could escape, war, pestilence, and catastrophe only served to punctuate a continuing advance. Because North America was so highly developed it was more exposed to the dangers of an unbalanced civilisation. When civilisation momentarily collapsed, the fall was harder and more painful than in, say, China. When a virus was on the loose the North American offered less resistance than, say, the Bantu. Twice the population of North America was drastically reduced, but it was probably restored by mass emigration from the crowded East. Population by the Twenty-Second Century must have been much smaller than when this history begins. The Twentieth Century learnt, and learnt painfully, the disadvantages of large populations. One of the lessons of that critical century was that the new techniques could provide a princely standard of living for small populations—and the obvious conclusion was that small populations were desirable. This end was largely achieved by indiscriminate slaughter, though not even the most enlightened statesman would admit to this as conscious policy. After the Fourth World War, quite apart from epidemics such as the one I have described, the pursuit of pleasure insured that the population would never increase again at the rate it had done in the later Middle Ages. In fact, it is doubtful if it replaced itself under normal conditions, although fertility probably increased after each decline.

This civilisation, whose tortured history I am trying to trace, eventually succumbed to a disease which we call, in terms of the individual, hardening of the arteries. It was assaulted by many enemies, external and internal, all of them seemingly more dangerous than spiritual decline, which finally brought it low. During the last dozen centuries of what was called, at its inception, Western Civilisation, there were always a few, poets and intellectuals for the most part, who proclaimed the inevitable breakdown of a society which ignored the spirit. But during these centuries these warnings were ignored. It was

so much easier to see that atomic fission or bacteriological action might bring the house down. Before ending this brief review of the calamities that befell men before they finally controlled their environment, I would like to give one more example of the kind of tragedy that could and did occur, and (which is more important) of the measures taken in self-defence. Man was able to defend himself against all his enemies, and finally to subdue them, but in doing this he overlooked the subtle change that was coming over himself, or at least failed to see its importance.*

Again I am not certain when these events happened. They belong to the non-political, non-historical period, when the only dates that were preserved were of astronomical importance. My source, an historian named Conington, did not consider it worth his while to say when these things happened. This was as natural to him as it had been to some earlier historians to state meticulously the exact day, and sometimes even the hour, when the most trivial occurrence took place. Conington (in his book *Nordenholt's Million*) tells us that a blight spread across the food-growing areas of the world. It appears to have started in London, England, where most of the horrors of the day seem to have originated.† As compensation for her long rest from 1066 England was becoming increasingly the target for catastrophe. She served as a modern Sodom. This blight was the work of *bacterium diazotans*, a super-denitrifying agent which, in addition to depriving plants of their nourishment, also transformed soil into sand. It may have been propelled by light-pressure from Venus; it may have been a bacteria which had changed its habits; the most popular view among scientists was that it had reacted in this particular way to an electric charge—in other words, it was a Mutant. Mutation was one

* I have had to make a choice among calamities. I was tempted to recount man's struggle against the Triffids, described by John Wyndham in *The Day of the Triffids*. The Triffid was a mobile, intelligent plant which challenged man's supremacy. No Nordenholt arose to combat it, although a man named Torrence had similar ideas, but unbacked by the same opportunities. This gap in the record will be filled later by my scribes, however, who have orders to copy books of this character.

† For this reason I place these events somewhere in the Twenty-First or Twenty-Second Centuries.

of the most powerful factors in the world after 2005. Its action was mysterious, its presence frequently unexpected.

Unlike the North American catastrophe I have just described, this one was slow in its advance and gave men time to think out methods of resistance. In England an industrialist and financier named Nordenholt was given dictatorial powers. His problem was simple: all plant life was dying and hence all food production, vegetable, and ultimately animal, was about to cease. The solution, on the other hand, was anything but simple. Nordenholt came at the end of a long line of industrial caesars, men who had imposed themselves on human development, and had accomplished more in terms of results than all the poets and philosophers put together: the Rothschilds, Vanderbilts, ~~Fords~~ and Morgans. But none of these had ever wielded the vast political power that was now willingly granted to Nordenholt by a terrified Government. In the last resort (and this really was a last resort) the British people put their destiny in the hands of a business man. The veil that had partly concealed the reality of Western Civilisation was finally ripped aside. Nordenholt, like all of his kind, was ruthless, materialist and anti-humanist. He decided that the menace could be countered but only by the sacrifice of many millions of lives. Accepting this proposition, he selected a fragment of the population who were to be fed from closely guarded stocks, while the remainder were left to starve. No politician, and no one brought up in the overt tradition of Western civilisation, could have made such a decision. It required the mind of someone who considered himself above humanity. Only by this method, Nordenholt argued, would they have time to restore the world's nitrogen supply. The selected population had to be concentrated and isolated from the remainder. The Clyde Valley was chosen. It was actually a belt across the Lowlands of Scotland, including both Glasgow and Edinburgh, and was called the Nitrogen Area.

Nordenholt carried out his plan with a quite inhuman and pitiless efficiency. Ireland was raided for cattle. All communications with the rest of the country were cut off. Conington, who was one of Nordenholt's lieutenants, described the minute detail of this operation.

CALAMITY PILED ON CALAMITY

Every telegraph and telephone exchange was gutted; the remaining artillery was rendered useless; all the printing machinery of newspapers was wrecked; every aeroplane was destroyed and practically all aerodromes burned; and as the trains and motors went northward in the night, bridge after bridge on the line or road was blown up. When morning came, there was a complete stoppage of all the normal channels of communication; and up to the Border the railways had been put out of action for months.*

Parliament moved to Glasgow where it was calmly dissolved by Nordenholt. Opponents of this measure and all members who did not possess any useful qualifications were returned to their constituencies—to starve!

His next step was to spread rumours of Plague, which was said to be especially severe in the Nitrogen Area. It was almost impossible for anyone outside to discover the truth of the matter, and this measure did in fact keep the vast majority of the population at a distance. The inevitable food shortage began to make itself felt, and bands of starving people roamed the country looking for food. Some managed to exist on fish supplies in the coastal areas, but later the fish seemed to change their grounds. It is probable that the majority died. Outside the Nitrogen Area civilisation collapsed more completely than it had ever done before. In London, which was visited by Conington, the old primitive instincts were coming uppermost again, and there were outbreaks of cannibalism, mass sadism, man-hunting, Voodooism and choreomania. The horror became complete when dying men were attacked by crows and rats.

While the extent of the epidemic that struck North America in the time of Ish Williams is uncertain, there is no doubt at all about the areas affected by *diazotans*. It was world-wide. Europe suffered perhaps more than any other area. The devastation was less in South Russia than in the rest of the continent, Coxington tells us, because the population was relatively thin. In Africa, India and China there was a

* It is interesting to note that the railways, which had been considered anachronistic in the late Twentieth Century, were still in use. They probably carried freight only.

mass-annihilation of foreigners, we are told. When food was scarce the alien was considered expendable; he came to be seen as a parasite on the indigenous population's resources. There was a great exodus westward from China but it petered out due to lack of food. A Nitrogen Area, centred on the Kobe shipyards, was established by Kiyotome Zada in Japan. The methods used were similar to those of Nordenholt—for instance, Manchuria and East China were raided for food. The inhabitants of Australia tried to find refuge in the Polynesian islands, but they took the bacillus with them. Some of the most remarkable results occurred in South America. The nitrate deposits in Bolivia and South Peru released their nitrogen, and the atmosphere was clogged with it. The Amazon Valley proliferated into a swamp. Stock was slaughtered in the southern part of South America and a considerable population survived on biltong. Central government in North America failed to maintain control and the continent split into national enclaves—Negroes in the South, Germans, Italians, Slavs, etc., elsewhere. Food shortage led to hostilities, especially between inhabitants of affected and unaffected areas. Only the Eskimos continued their normal lives because the bacillus could not withstand extreme cold. It was for this reason that enormous shoals of fish moved to the Arctic and Antarctic waters for their plant food.

I do not feel inclined to attempt the dating of these events. I record them as a random example of the kind of challenge men had to face during the more recent part of their history. Serious as the crisis was, it certainly did not lead to such a complete breakdown of society as the epidemic in North America was responsible for. One or two points are worth noting. It must have occurred at a comparatively early date, when national distinctions were still important. It resulted in considerable loss of life, but there was only one danger: starvation. Civilisation itself did not break down, especially in those areas where the population managed to subsist, even if at a greatly reduced standard of feeding. Some areas were obviously less affected than others, e.g., in North America. It is quite likely that New Zealand, which on more than one occasion escaped the worst ravages of war and natural calamity, was unaffected on this

occasion. There were at least two Nitrogen Areas, perhaps more. Every time a catastrophe of this kind occurred, one more blow was struck against political freedom. Just as it had once been believed (though erroneously) that democratic methods were inadequate to direct war, so now the people of Britain and Japan willingly surrendered their liberties to one man in order to preserve lives—and only a few at that! Both Nordenholt and Zada said to their peoples: I offer you a lottery, you may be chosen or you may not. They had to accept. I have already explained how, in crisis, it seemed natural for men to safeguard their technicians. Now, in another crisis, they looked to the business moguls, men whom generations of advertising had persuaded the people that they were the natural leaders and saviours of mankind. It is not surprising if the remnant who survived these catastrophes were of a special type: power-obsessed materialists. The interesting conclusion, and the only reason why I have found this study worth the doing, is to find these men finally admitting their defeat.

Nordenholt succeeded—that is to say, he managed to restore the nitrogen to the atmosphere. But it was a very near thing. He discovered that the layer of civilisation and rationality covering the primitive human mind was very thin. It seemed so obvious to him that the only way to preserve society in any form was to sacrifice about nine-tenths of its human lumber. Christianity was dead, except as an institution; the Christian idea of the individual soul being intrinsically valuable had died with it. Nordenholt's career was the triumph of a tendency (it can scarcely be called a philosophy) that had begun with Samuel Smiles and the criterion of success. But not everyone had been trained to assess a situation so dispassionately as Nordenholt, nor to bear the hardships and disappointments so stoically. Nordenholt knew that his plan could only succeed if everyone (and everyone was a specialist or, among the unskilled, a shockworker) worked rather harder than seemed possible. Therefore when a revivalist appeared, urging passive resistance, rest and the passage to Nirvana, he soon gained a large following. Nordenholt bided his time with the patient cunning of his kind. He waited until the revivalist's prophecy

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that he would rise in glory to the skies had failed, then shot him. But there was by now a large number of discontented men and women who were no longer prepared to accept Nordenholt's commands as divine law. Nordenholt did not flinch. He trebled the work minima (the revivalist period had led to considerable slackness) and those who failed in their quotas were deported. A Labour Defence Force controlled the Area. The revivalists remained active for a while, and Nordenholt's whole scheme was in jeopardy when they started dynamiting mine shafts. Eleven thousand miners were killed and many mines were put completely out of action. Finally the nitrogen plants were only able to produce the gas in sufficient quantities by the use of atomic energy on a wide scale.

Plant life was restored. Millions of human beings were sacrificed. But the peculiar quality of this civilisation was preserved—for what purpose I hope to show in the following chapters.

The Space Era

MANY OF THE events I have referred to in the last three chapters occurred during the Space Era. It is now time to get that period into focus, to look at it as a whole. Mankind spent its first few million years of existence preparing for this. Of all the possible decisions men might have made, they made this particular one: to populate space. It was considered their greatest achievement at the time. It was in fact a hopeless blind alley.

The actual extent of the Space Era was from about 1980 to 2960. It was very slow in developing at first. There were years of experiment, many failures, some notable successes. Some of these, such as Weston and Devine's visit to Mars, already referred to, and an amazing journey to the Moon, which I will record later in this chapter, impress us far more than the later freight and passenger services from planet to planet. There was something challenging, ingenuous and eternally youthful about the first trip to the Moon, something that put it in the same class as Columbus's discovery of America or Bannister's running of a mile in four minutes.* The exploitation of space bore as little relation to that first brave expedition as the exploitation of Africa bore to Stanley's voyages up the Congo. Apart from the natural slowness of development in the early years, progress was checked by the wars and disasters of the Twentieth and Twenty-First Centuries. Mars itself was settled, as we know, before the Fourth World War broke out. Most of the settlers returned and for a generation or so Mars was an empty planet.

* This incredible-sounding feat was actually accomplished in 1954. A mile, I should explain, was a bit more than one and a half kilometres.

and Earth was licking its wounds. It wasn't until men forsook politics and agreed to concentrate on material comforts to the exclusion of all other goods that space travel reached its peak. From about 2400 to 2800 was the heyday. After that came the decline and death by inanition.

The parallels between the Age of Discoveries on Earth and the Space Era are fairly close. In each case there was the possibility of complete anarchy or an attempt to regulate progress by authority. Just as the Pope divided the new lands between Spain and Portugal, so the Tycho Convention of 2054, signed by the Atlantic Federation (as what remained of Oceania called itself after 2005), stated that legal rights in space extended to a thousand kilometre limit.* This must have been quite meaningless, in view of the revolutions and orbital paths of the Earth and other bodies, and in any case impossible to enforce. But it was symptomatic of the anxiety felt by people who had learnt, and learnt painfully, that the new powers and techniques were highly explosive and reacted violently to only a small degree of friction. This Convention might also be compared to The Hague Convention, which set out to ban war and ended by hoping to soften it, which it didn't; Tycho provided that Departments of Space Medicine should be set up at Universities and that there should be standard medical tests for space-crews, including an orientation test to discover reactions to the absence of gravity. Tycho did bring a certain amount of order to a disordered field. The Federation established an Inner Station for take-offs, and beyond it a series of Meteorological Stations, as much as 6,000 miles up, and circling the Earth four times a day. On the Inner Station sunset occurred every hundred minutes.

It was indeed a new world that man was making. The best source for the strange life and structure of the Inner Station has been left by Arthur C. Clarke, and is called *Islands in the Sky*. He described the Station as a great open lattice-work of spidery girders in the shape of a flat disc. Spherical buildings of varying

* It is doubtful if space travel had started up again by this time. It is quite likely that this Convention was an attempt to regulate before a *fait accompli* made regulation impossible.

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sizes were connected by tubes wide enough for men to travel through. In the centre was the largest sphere of all, dotted with the tiny eyes of portholes and dozens of antennæ jutting in all directions. A miniature space-ship, actually a tiny cylinder large enough to hold one man, brought up a towing cable and hauled in the visiting ship like a fish. Passengers passed from the ship to the Station through a pressurised coupling clamped on to the side. Although weight had vanished, momentum remained. Long implements called 'broomsticks' were used for propulsion. They consisted of one hollow tube sliding inside another, connected by a powerful spring. One tube ended in a hook, another in a wide rubber pad. Away from Earth, men's legs were useless; instead they shoved with the pad, pulled with the hook, and trusted to the spring to absorb the shock when they reached their destination. A hundred technicians worked on the Station, under its Commander, and including apprentices. Their work was to refuel space-ships on their way out from Earth and to carry out repairs and overhauls. There was also a Residential Station where passengers from Mars and Moon could get acclimatised to gravity. (There was, of course, a much lower gravity field on these planets.) Clarke compared this Station to a giant flywheel, compact and moving slowly on its axis. A long narrow cylinder jutted from its centre, driven by a motor against the Station's spin, and hence standing still in space. The Earthbound ships coupled to it and the passengers went aboard. On the Residential Station they worked slowly from centre to rim, where there was normal Earth gravity, owing to centrifugal force. An interesting point to note is that most of the equipment was manufactured on and shipped from the Moon, when the Inner Station was fully organised. Low gravity made this more economical, despite the distance. It was found necessary to keep the air moving with ventilators. A flame, if held still, soon burnt out because the smoke couldn't rise and so choked the flame.

Well beyond the Inner Station were two Meteorological Stations, 6,000 miles from Earth, moving over the Equator (as did the Inner Station) and circling the world every six and a half hours. It was possible to see a large area of the world from

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ANNO DOMINI		
Today		3750
		3700
Attempted Sophocratic Invasion (America)	3310	New Cretan System Triumphant
Attempted Sophocratic Invasion (America)	3290	
Attempted Sophocratic Invasion (N. Africa)	3270	
Pseudo New Cretan Settlements, California, N. Mexico	3250	Sophocratic Epoch
Rhodes and Cyprus	3240	
Foundation of New Crete	3200	
Middle and Late Iron age Enclaves	3090	Logicalist Epoch (Stasis of Cosmos)
Bronze and Early Iron Age Enclaves	3080	
<i>A Critique of Utopias</i>	3070	
	3040	
Triumph of Pantisocracy	2960	SPACE EPOCH (Late Christian Epoch—Graves)
Falkland Declaration	2950	
	2910	
Romano-Orthodox War (Graves)	2650	
	2510	
	632 A.F. Brave New World)	
(2201) The Sleeper Awakes	AGENCY CONTROL	
	2300	
	End of Sino-American War, beginning of Second World State	
? Time Travel begins	2200	
	2160	
	2155	
New Zealand Rediscovery of N. America	2108	
Invention of hyperdrive	2075	Period of Radioactivity
Tycho Convention	2054	
Discovery of Vitons 2005	2005-6	
FOURTH WORLD WAR	2003	THIRD WORLD WAR (atomic) 1985
Negro Exodus to Mars	2001	
Settlement of Mars	1985	
Rumoured navigation of Venus	1984	First World Republic
Orwell's study	1975	
Attempted Burning of the Books (U.S.A.)	1970	
Merging of U.S.A. and British Commonwealth	1962	? 'Martian' Invasion
First robots	1960	

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these Stations, but the poles were distorted. This disability was met by a Polar Station with its orbit passing over the poles. The three Stations together could get a practically continuous picture of weather over the whole planet. At 15,000 miles there circled biology labs and the Space Hospital. These carried out research into zero-gravity conditions and incurable diseases on Earth which might be treated in space. One advantage of life at such altitudes (if the word may still be used) was that the heart did not have to work so hard to pump blood. Last in the chain were the three Relay Stations at 22,000 miles. They took twenty-four hours to make one revolution, travelling at 6,000 miles per hour, and appeared fixed for ever over the same spots in Uganda and each coast of the Pacific. Linked by radio beams, they provided television coverage over the whole planet. They were built of the usual rectangular lattice-work with hundreds of small concave reflectors covering the side facing Earth, and they focused systems that beamed radio signals to Earth or collected them on the way out. Other reflectors beamed signals to other Stations.

Before these Stations were ever built men had made forays into space but permanent expansion required an elaborate organisation such as the one I have described. The Inner Station served the same purpose as the Cape of Good Hope on the sea-journey from Europe to the East before the Suez Canal was cut. An equally intricate organisation was required on Earth itself for the launching and servicing of the rockets. In the early days of space travel all rockets left from Port Goddard, on a plateau levelled out of the New Guinea mountains. (Around Port Goddard untamed head hunters still roamed the forests!) Here were to be found the fuel storage tanks and the liquid ozone plants which made the new form of travel possible. There were three good reasons for using New Guinea as a base; despite its proximity to the hostile Asiatic power. Being so near the Equator, rockets were already moving from West to East at 1,000 m.p.h., which is a good start for any ship; the denser layers of atmosphere were below the port, so air resistance was reduced; and the area was practically uninhabited—the noise

of launching ships was literally deafening without adequate precautions.*

Space travel had its dangers, one of which was that of being hit by meteors. Considering the extent of space they were not a great nuisance, and the smaller ones could be dealt with fairly easily. If the hull of the ship were pierced an emergency Spider automatically ran to the spot and slapped a hot patch on the hole, welding it tight. (It was estimated that the chance of being hit by a mountain-sized meteor was about once in a million years.) The Inner Station had to take similar precautions. It was protected by double walls, but if a meteor perforated both a circular disc with a rubber flange was slid over the leak until a proper repair could be made. In addition to meteors there were other impediments in space. One of the problems of the period, when atomic energy was being used on a large scale, was the dispersal of radioactive waste. The first solution, made by an Atomic Energy Commission, was to 'bottle' it in missiles and shoot them into space. It was realised later, however, that these containers constituted a growing danger to space craft, and another means of getting rid of the by-products of atomic piles was adopted. The containers themselves were collected and buried on the Moon. What the Selenites thought of this (if they still survived) is not disclosed.

Men had graduated from ocean-going ships to space-ships. A freighter had a hull like a thin cigar, but surrounded by four huge fuel tanks, like giant bombs, which were jettisoned as soon as they were dry. Each was nearly as large as the hull itself. Three wings served as supports and were also used for gliding on the return to Earth. The ship was handled by robot controls, with a pilot ready to take over in an emergency. The passengers lay flat on couches. Booster rockets carried the ship out of the atmosphere, then burnt out and dropped away. At first the passengers felt very heavy, about three times their normal weight, caused by the thrust of the rockets. As the rockets cut out silence returned and there came a feeling of weightlessness because they were no longer resisting the pull of gravity but were in a kind of permanent 'fall' five hundred

* It is unknown how many head hunters were deafened, or if anyone cared.

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miles beyond Earth, and going round it. The space liners were specially designed for the comfort of the passengers, and revolved slowly to give them the sense of gravity. They were shaped like giant doughnuts, with cabins and living quarters forming a ring round the power plant and drive units. During a journey the ship's spin would be gradually reduced (going to Mars) or accelerated (going to Earth) to accustom passengers to the correct degree of gravity.

Space travel demanded a special costume, owing to changes in atmosphere and pressure. One type of space suit, resembling the clothing worn by sea divers and giving free movement to the lower limbs, was only used on certain planets. On a space-station, however, legs were no longer necessary. The lower part of the suit was merely a rigid cylinder. Inside was a little seat and the head was encased in a transparent dome. The arms could be pushed into flexible sleeves ending in gloves. Whenever anyone wished to leave a Station he passed through double doors, the first one creating an air-lock, and propelled himself with the aid of small rocket units. In the event of an accident to the ship the crew would lock on force units and float through space. (Without this aid they became human meteors.) A radio set in the helmet gave their last contact with the rest of humanity.

I have referred to the Space Hospital, one of the most ambitious of all space projects. It was like a huge crystal flower with its face turned to the sun. It was at least 500 feet in diameter. Patients who would have died or been completely disabled on Earth, made remarkable recoveries in space. Not all could return to Earth, however. Some had to retire to Mars or, in extreme cases, the Moon, where conditions were in some respects less severe. The severest cases had to remain on the Station.* A problem that had interested some of Earth's greatest scientists and historians, men like G. B. Shaw, now received serious attention. Low gravity opened up the possibility of lengthening the life span because the heart had practically no work to do.† Lack of gravity also increased the size of

* Man's tenacity in clinging to life, even the merest fragments of life, became quite astonishing in modern times.

† Quite early in the Space Era people lived to a hundred and retained their faculties into the late senectus (Russell).

living creatures. One of the favourite showpieces in the biophysical labs was a terrestrial hydra, normally about a tenth of an inch long, which had become as big as a tree in space.

This, very briefly, was the astonishing new way of life which space travel had introduced. I have gone some way ahead in my narrative—centuries beyond the first clumsy efforts of Weston and Devine, Bedford and Cavor, even the more organised activities of the American Expedition to Mars. I have no time to give a chronological account of discovery and settlement and exploitation, the extension from the Solar System to other galaxies, the repeated failures and the ultimate successes that are a part of all exploration. The information is at best fragmentary. I will try to set out the highlights, and all the while I must insist that I am describing a stupendous futility. What a booming and zooming, a hurtling and whizzing, there was in those centuries from one planet to another, from satellite to satellite, galaxy to galaxy! The spaceways became cluttered with de luxe cruisers, chugging freighters, panting pullmans, light auxiliary vessels, refuelling depots, canteens, first aid stations, public parks, Froebel schools, cricket pavilions, artificial lakes, ill-lit grottoes, milk bars, bureaux d'échange, first, second and third class hotels, rubber dinghies, fat women with Kiss Me on their sailor hats, pimps, prudes, brothels, bordelloes, bagnios, bagatelles, skittle alleys, perambulators, nursemaids and guardsmen, Pulitzer Prize winners, naughty pictures, Egyptian dragomen, pyramids, sphinxes, minxes, acropolises, oracles, colossi, young poets, little reviews, glossies, weighing machines, what the butler saw, bibles, best-sellers, polo players, Player's cigarettes, Republicans and Democrats, pianolas and banana skins. But what was it all for? Ask me another. I am only a recorder, only a part-time philosopher, an author without benefit of publisher, unless someone re-invents the printing press. I write to amuse myself, and I have enjoyed this paragraph.

Let us look at some of these 'islands in the sky', island paradises, Spatial Hawaiis, as the advertising agencies called them,

or spatial extensions of man's thirst for power, as university professors called them. Do you remember Mars? It was settled, then deserted and then re-settled by a lot of neo-Welshmen. But when Earth had recovered from the suicide attempt of 2005, attention was once again turned to Mars. It was decided that Mars would serve as an isolation planet for sufferers from a horrifying new disease called 'blood rust'. There was no known cure on Earth and it was contagious. (My belief is that it was one of the more lasting effects of radioactivity.) The rust (a quickly drying and flaking flow of blood) ran from mouth and nose, ears and fingernails. The sufferers were deposited on the shores of one of the Martian seas, and given a cache of food each. They were told that the health-giving atmosphere of Mars would cure them in a year. It sounds like a sour joke to me, a cruel definition of 'cure'.

You may remember Captain Wilder of the Fourth Mars Expedition. His fate was comparable to that of Columbus, who returned to Spain for the last time in chains. Wilder was rusticated for questioning colonial policy. He maintained, for instance, that Neptune, Saturn and Jupiter were unfit for human settlement. So far as I'm aware he was right—I have found no evidence of human exploitation of those planets, while I do know that the Ursans were allowed by treaty to exploit two of them—but such views (probably expressed with vigour, for Wilder was a hard-bitten spatial bluenose) offended bureaucratic *amour propre*. But whose *amour propre* was at stake? We learn from Jon J. Deegan (*Planet of Power*) that a controlling body called Inter-X decided where expeditions should be sent, where there should be settlement or exploitation, and drew up a code governing relationships with other species. For instance, Inter-X would not allow the use of speed-gamma pistols against intelligent creatures unless two members of the expedition had been killed. (Perhaps a better formula than the traditional 'except in self-defence'.) But this regulation naturally demanded methods of recognising intelligent life. Inter-X recommended three tests: look for items of adornment or clothing, watch for the employment of distinct method in activities, and enquire

whether lesser forms are exploited to benefit the master-race. Deegan added that these tests were not foolproof.*

Then it became necessary to adopt an exploration policy, especially after the invention of hyperdrive in 2075, which enabled men to leave the Solar System. Colonisation on Earth had always been undertaken for the cultural, economic and material benefit of the primitive races. (A minority group disputed this.) One of the earliest spokesmen of disguised self-interest was Weston, the first man on Mars. He believed it was man's right and his destiny to populate space. Man was driven by some mysterious urge—indeed, there was no rational basis to Weston's aims, only the mysticism of conquest and expansion. This view remained implicit in the thought of men throughout the Space Era. We find it in Edgar Rees Kennedy (*The Mystery Planet*), who chronicled one stage in the unending leapfrogging through space. An expedition had reached the Alpha Centauri system and found no intelligent life.† Yet one planet of the brighter sun seemed capable of supporting human life and *would serve as a jumping-off ground for Procyon and Sirius!* No end was visualised. Almost as an afterthought, as Kipling might have referred in passing to Jamaican sugar, Kennedy drew attention to the mineral wealth of these worlds.

One of the best studies of the colonisation of space is to be found in Fletcher Pratt's *The Undying Fire*. This was written when the movement was at its height. By this time terrestrial politics were merely parochial. Earth had become one of a group of planets that together constituted the Council of the Worlds. (The nearest terrestrial analogy is to be found in the old British Commonwealth of Nations, for all the other planets of this group had been colonised from Earth.) Pratt wrote at a time when the political structure was cracking. The Council was relatively tolerant and easy-going in its administration and aroused the antagonism of all those who thought they could do better. Political parties no longer existed, so that the new group who desired power had to adopt conspiratorial methods.

* Deegan's work must be treated with the utmost respect, especially those volumes inscribed 'authentic'.

† It is clear from Blish's work that they were mistaken.

They called themselves indifferently the Reformers and 'The Efficiency Party on Earth, depending on whom they were appealing to. They gained their main support from the colonists of Polska, Gheorgilul and Kaganovitch, who came from the old countries of East Europe, and still retained the complete paraphernalia of totalitarian dictatorship. (On Earth both totalitarianism and democracy had vanished, and had been replaced by a passive hedonocracy based on plenty.) The method of settlement was known as 'unit colonisation' whereby separate planets were colonised by separate races. (This did not apply to planets in the Solar System, which was colonised before this policy was adopted.) The above-mentioned planets were settled by Poles, Roumanians and Bulgarians respectively. Planets were also classified. Pratt mentions a Chilean planet called Aldea which had once been a first-class planet but was downgraded with a caution for allowing an internal war to break out. As a punishment Aldea lost her delegate to the Council. Neu Bayern was a German colony, still on colonial status and not yet accepted as a fully responsible member by the Council. It was allowed only one satellite station and a single spaceport. Like all German colonies it was tropical, for Germans had never been able to inhibit their yearning for the sun—in terrestrial terms, the South. National characteristics tended to become emphasised on other planets, e.g., German formality was even greater than it had been on Earth. They still believed in the old Herrenvolk theory. One of the most unusual colonies was Danaan (Irish) which was closed to all visitors except official ones. Danaan was remarkable because no world government existed and a struggle for power was still being contested by rival groups. At one time it had been admitted to the Council on a non-voting delegate status, but this had not proved very satisfactory.

Colonisation was partly guided by Huntington's Law which stated that colonists coming from an unfavourable to a highly favourable climate experienced a release of racial and individual energy. The identity of Huntington is unknown to me.

While at first space travel only accentuated man's arrogance, further experience had the opposite effect and taught him

humility. For a long time man regarded himself as Lord of Space—and then a crew, wandering in the Tyban system, came across undeniable evidence that others had been there before them. Michael Shaara tells us that this discovery was made three hundred years after men had first ventured into *interstellar* space! (*Orphans of the Void*.) There was an even more intense feeling of deflation when, on the third planet, the same crew saw cities, each with a huge charred hole at least three miles in diameter and very deep, in the centre. They knew what that meant, although Earth itself had managed to avoid the same final disaster. But an even greater shock was awaiting them. Having landed, they discovered that the planet was inhabited by robots. Slowly they learnt that the race that had made the robots (who called them the Makers) had been exterminated by radiation and bacteria. All life was destroyed but the robots survived. The Makers had been technically advanced even beyond men, and had produced robots in automatic factories. One of these survived the catastrophe and continued its production. By the time it wore out the robots had learnt how to produce their kind. But one thing they could not supply or bring back—the purpose for which they had been created. Theirs was an existence of utter futility for they had been geared to the service of other beings. When discovered by men they were awaiting the return of the Makers. Filled with compassion, the crew made plans to remove them to Earth, but I don't know whether this was ever done. The thing that really sobered the explorers was the realisation that the robots had been waiting 25,000 years.

This made men feel the merest tyros in the field of space travel—probably a salutary experience. They began to reconsider the stories of Flying Saucers that had been so prevalent in the Twentieth Century, and which had never been satisfactorily explained. Some, including Henry Kuttner, believed that these had been missions that had assumed the task of maintaining peace in the Solar System. Perhaps they themselves had succumbed to the very danger they hoped to ward off from outside. Whatever the facts, it was now clear that men were not the pioneers they had believed themselves to be. This,

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as much as anything else, helped to induce the acute sense of *fin d'époque* that overcame the human race round about the Thirty-First Century.

* * *

The psychology of space is fascinating. It must not be forgotten that all human characteristics were intensified in space. A little comparative space history will teach us certain things about men that are difficult to illustrate clearly from his life on Earth. Just as the minute hydra swelled gargantuanly, so did man's ambitions and his capacity for ruthlessness. It is worth while comparing his approach to three planets: Mars, Moon and Althan. The voyage to the Moon was one of the pioneer classics and was recorded by Wells in *The First Men in the Moon*. We come up against Wells's usual obtuseness about dates. He said 1899; this is obviously impossible. It could have been 1999, though I place it earlier.* In any case, it was the second planet to be visited. (Unconfirmed rumour claimed that Venus had been circumnavigated in 1985, but I am sceptical of this.) Men very rapidly lost interest in the Moon, using it only as a refuelling station and dumping ground for radioactive waste. Much to human surprise, the Moon was inhabited. Wells called these beings Selenites, rather than Lunatics. Most of them were neuters. A few females produced larvæ but they were tended by workers. Each individual was trained physically, emotionally and (if necessary) intellectually for the job for which it was best suited. For example, brain workers had enormous brain cases while the remainder of the body was underdeveloped and attenuated. Certain manual workers were confined in jars with their limbs free, so that they alone developed.† Unwanted

* Arthur C. Clarke says an expedition reached the Moon in 1996, and it was not an exploratory one. Perhaps it would be safer to date Bedford and Cavor's visit in 1989. The later expedition discovered a pyramid high above the edge of Mare Crisium which Clarke believed had been erected millions of years ago by visitors from Outer Space! Edgar Allan Poe also records a Dutch expedition to the Moon in the early Nineteenth Century. This baffles me.

† This is interesting, as such Selenite workers must have resembled spacemen in appearance. The comparison would have horrified the spacemen, who considered the Selenites as primitive inferiors. This attitude is similar to that of the White people in the days when skin colour still varied. They despised brown people, yet used to strip off their clothes whenever the sun appeared, to bronze their own bodies.

workers were drugged until their services were required. It was the kind of society that certain philosophers (including Wells) on Earth liked to advocate, but at the time most people were horrified by it and regarded the Selenites as scarcely above the level of savages.

I have described the visit of Weston and Devine to Mars (Malacandra). The journey to the Moon was also undertaken by a scientist and a business prospector (Cavor and Bedford).^{*} This was the typical pattern of the period, although the period was ending: science the handmaid of commerce. These men were amateurs, yet much more intelligent and worthy of respect than the professionals of the later Space Control. That is why I wish to make the comparison with Hansen and Harmer, who first landed on Althan and contacted the Siriuns. Weston and Devine, if it is true, were exploiters, one racial, the other commercial, but Hansen and Harmer were simply secondary schoolboys who would never mature and would always believe, sincerely and bigotedly and dangerously, whatever their masters told them. Most of the men who pioneered the way to other worlds were, naturally enough, victims of fear at one time or another. It is usually fear that leads men to exhibit the worst aspect of their natures. Devine shot *hrossa* without provocation. Bedford massacred Selenites in the Moon caves. But in each case, particularly the latter, there was a feeling of personal danger. In the case of Hansen there was cold-blooded determination to wipe out a Siriun settlement on the flimsiest suspicion that the Siriuns intended to conquer the Solar System. Having escaped from the Siriuns, Hansen and his crew returned to exterminate them. Every death of an Earthman was due to alien devilry, but the killing of an alien was deserved retribution. Bedford killed in a frenzy. Hansen (and Weston had been his forerunner) killed for what was at bottom an imperialist idea. I am supported in my belief that many of these alien races were fundamentally friendly by the excellent treatment apparently given to Cavor by the Selenites once they knew they had nothing to fear from him. On so many occasions the aliens

^{*} It is noteworthy that the invention which made their journey possible, anti-gravity plates, was lost and not rediscovered for several centuries.

were not given a chance to show their friendliness. Men are so slow to learn. Centuries before this William Penn and the Jesuit missionaries had discovered the underlying kindness of the Redman while all around they were being slaughtered as unteachable savages.*

After Mars and the Moon it was the turn of Venus. One of the most astonishing adventurers in the whole of human history was Dr. Elwin Ransom, a mild-mannered, rather unenterprising scholar who became a pioneer in space as the result of a fabulous accident. As I have already recounted, he was one of the first three men on Mars simply because he was kidnapped. It is fortunate for us that Ransom, rather than the idiot boy Weston and Devine originally intended, was taken. For all his shortcomings, Ransom was intelligent, he was an expert etymologist (it is amazing, the apparently trivial studies that can acquire cosmic importance by a shift in circumstances) and, above all, he was a man of goodwill. It was this latter characteristic that impressed the Oyarsa of Malacandra, and which led him to take Ransom to Venus. For Ransom did not go by normal man-made methods of locomotion. He was taken to Venus and returned by means quite beyond man's understanding, though it seems likely that at a much earlier date, in the days of the Vimanas, men had been acquainted with them.†

Ransom's discoveries threw immense light on many dark portions of man's development. It had long been suspected, though by unorthodox thinkers and scientists, that men were but a fragment of a race that had once inhabited the whole Solar System, and that they had maintained contact between the planets until some unknown catastrophe (probably atom war) had reduced them to savagery. The Solar System had once been known as the Field of Arbol and a common language

* Earthmen learnt their lesson when creatures from Ursa Major began to settle on Jupiter. In the conflict that followed the Ursans showed themselves distinctly superior, and against their will Earthmen had to treat them with respect (while still retaining the right to refer to them as 'monsters'!) This dispute actually ended in a treaty, the Ursans offering Earthmen the right to settle on certain planets in the Golic system in return for permission to mine radium on Jupiter and Saturn (unsuitable for human occupation).

† The secret, lost in some early cataclysm, was probably based on sonic vibration.

had united all branches of intelligent creation. It was called Hlab-Eribol-ef-Cordi (Old Solar) but had been lost on Earth though it was still used on Mars and Venus. Whether it survived man's colonisation is uncertain. I used the term creation above because, although scientists had ridiculed the idea of a divine creative act for many generations, Ransom discovered that an actual creation of human-like beings (the main difference being in colour, which was green) had taken place on Venus. Ransom believed that he had been taken to Venus to help defend the new Adam and Eve against the forces that had ruined man's salvation on Earth. Suddenly, in the midst of doubt and ridicule and bigotry, Ransom discovered an actual Garden of Eden. He assumed that God (Maleldil) was following the same pattern of creation as He had first used on Earth. The creatures of Mars belonged to an earlier pattern that Maleldil had discarded. But it was too late to turn the tide. The end of Ransom is unknown. It is certain that he was unable to modify human arrogance and confidence in human powers. Man was now constitutionally incapable of believing in the creation of his kind, even when he himself began to seed the universe with different forms of humanity evolved in his laboratories.* It was not long before men were streaming to Venus in their restless thousands, blotting out the new hopes that Maleldil had raised, commercialising the planet and corrupting themselves in the process. At no time either before or since has the power of the wicked yet unknown *Eldil* of Earth been so triumphant. †

Ransom saw only a small part of Venus. He believed it consisted mainly of floating islands which rocked and writhed on the surface of the ocean like enormous water-lily leaves. There was fixed land, and Ransom visited it, but he did not realise its extent.

The most interesting aspect of Ransom's journey, apart from its theological implications, was his renewed struggle with Weston. The lives of these two men constituted an individual drama which in some ways was of more significance to mankind than their physical achievements. Ransom fought for the losing cause. He was the last hope of decency but men had ceased to

* The best authority on this phase of artificial reproduction is James Blish.

believe in decency. Weston regarded himself (and we must realise that all Weston's thinking was based on a widely accepted ethic) as the agent of the Life Force. He had once regarded himself as a missionary spreading human civilisation through the Field of Arbol, but had discarded this idea for something loftier and more mystical. He followed Ransom to Venus (Perepandra in Old Solar—see the book of that name by Ransom's biographer, C. S. Lewis) to ensure that Ransom would not deprive the planet of man's rich gifts. In his view Ransom was a stupid sentimentalist, the kind of person who would refuse a lift in an atomically driven car because atomic power had also been used to kill people. Not that Weston was a simple materialist—scientists of his calibre had left that kind of attitude behind long ago. Weston believed unreservedly in Spirit, but the Spirit was entirely amoral. He even deferred sufficiently to Christianity to interpret the ancient dualism as God, the end to which we are driven, and Devil, the power that drives.* Talking to Ransom he said the goal was 'pure spirit: the final vortex of self-thinking, self-originating activity'. He spoke of the Force he served 'as a great, inscrutable Force, pouring up into us from the dark bases of being. A Force that can choose its instruments'. Weston believed that he had been chosen and that he was guided. It was clear to Ransom that his megalomania was driving him insane, especially when he became capable of speaking in these terms: 'There is no possible distinction in concrete thought between me and the universe. In so far as I am the conductor of the central forward pressure of the universe, I am it . . . I am the Universe'.

This marks an important point in man's mental development. Nothing expresses the mythology and dogmas of a civilisation more clearly than insanity, and the form it takes.

* Weston's dualism was really synthetic, i.e., whatever contradictions he recognised, he desired to reconcile them. Nothing, in Weston's view, was irredeemable, and the essence of dualism is irredemption. It is true that absolute dualism is rare; Basilides may have 'deified the devil', but the devil never deified Basilides. Probably wasn't interested. Even the Valentinian æons and the Syrian demiurge attempted to bridge unbridgeable gulfs, but only Weston regarded the gulf's especial virtue the necessitation of the bridge. For further discussion of this fascinating subject see Clement of Alexandria.

Men were already beginning to perceive that the proper study of mankind is insanity. Before this* time it had been fairly common for a plumber to believe that he was Napoleon or a bank clerk that he was Frederick Barbarossa. But here we have a new refinement where a scientist believes he is the Universe. Once men ceased to worship God and began to worship themselves, it was inevitable that they should raise up the concept of Homo Deus. And after that it was inevitable that someone should claim that he was The Man in being, the Universe in essence. Weston was the first but this form of *Ecce Homo* was to echo in a thousand petty ears.

Nothing could save the nascent Venusian civilisation. Just as organised American expeditions had followed Weston and Ransom to Mars and turned it into a human colony, so they attempted the exploitation of Venus. But it was not so easy: If there were difficulties to be encountered on Mars, they were encountered a hundredfold on Venus. The American leaders of the Atlantic Federation wished to control the planet before their Asiatic rivals forestalled them, but few were anxious to leave a comfortable Earth to become Venusian pioneers. As a result the Government took the extraordinary step* of turning the enterprise over to an advertising agency called Foster Schocken Associates, who had already organised the whole Indian sub-continent into a single cartel known as Indiastries, and in the teeth of fierce Sinoese opposition.† Somehow hundreds of thousands of ordinary people had to be persuaded that they would make their fortunes on Venus, that their fondest dreams would be fulfilled on that planet, and that so far from being hard life would actually be paradisaical. By this time advertising skill was capable of making people believe that two and two made five and that suffocation was an excellent cure for asthma. Venus was, it appears, not an attractive planet. There was almost continual rain and the sun was rarely visible. Colour as we know it was practically non-existent. It was a world of black and white, white jungle with pale cheese-coloured

* Perhaps not so extraordinary, as later a group of agencies actually gained control of the Government apparatus.

† The best account is to be found in *The Space Merchants*, by Frederick Pohl and C. M. Kornbluth.

leaves. The rare days of summer that Ransom fortunately encountered were glorious but insufficient to compensate for the oppressive gloom and damp of the remainder of the year. There were many rivers on the Fixed Land, and they all ran down to the Single Sea. The one continent, three thousand miles long and a thousand miles wide, was set in the midst of the sea. Every spaceman going to Venus carried a little packet which, as the result of pressure from a hidden chemical, could be inflated into a boat. Vegetable growth was extremely fast, as might be expected. Fungus would grow out of a dead man's mouth in a matter of minutes. The animals were correspondingly large. We read of one monster that was half a mile wide and a mile high and walked on a thousand electric blue legs.

Probably most people who went there spent the new few years thinking how pleasant it used to be on Earth, but return was not easy, for the colonists came by contract and labour was usually indented. The greater part of humanity consisted of sleepwalkers who did what Foster Schocken Associates, social hypnotists, and a few other equally irresponsible bodies, told them. Engineers were imported in large numbers to try to make life at least bearable. The answer to the special conditions found on Venus was the Sun Dome. This was a yellow house, 15 feet high, 100 feet in diameter. A small globe of yellow fire floated freely at the top of the building, looking the same size as the sun on Earth. These domes were warm, quiet and above all dry. They were sanctuaries from the hell of Venus. According to Bradbury there were one hundred and twenty-six of them. But they didn't compensate, any more than a dug-out used to compensate the soldiers in the days of trench warfare. The native Venusians lived under the sea (Ransom had been unaware of their existence); they were hostile and occasionally came out to attack the Domes. If you couldn't find your way to a Dome fairly frequently you were finished. The rain would beat down ceaselessly, you would lose all feeling, you would go deaf and would finally refuse to move. It seems very unlikely that the natural products of Venus ever paid for the immense suffering the colonisation entailed—if suffering can ever be paid for.

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A few words about Mercury. The first landing was made by Commander R. Doyle, who very soon realised that the planet was even less friendly than Venus. It always has one face towards the sun, with the other side in perpetual darkness. There was a narrow twilight zone between the hemispheres where temperatures were not too extreme. The temperature in the sunlight was 700 degrees F., which softened the rock and with the help of gravity crumbled it. Hence there were no mountains but several lakes of molten metal. On the night side the temperature was 400 degrees below freezing point. This and much of the Twilight Zone was fairly mountainous. The night side was never completely dark, because a certain amount of light was given by Venus and also Earth and the Moon, which formed a double star. But there was no heat. The native Mercurian was like a giant white spider. His body was a sphere about a metre across. He had eight legs but he always kept four tucked up close to his body, using them when the others became too cold. He also had two handling limbs with horny claws. A tiny bulge on the body represented his head, and he had two large eyes for use in Night Land and two smaller ones for the Twilight Zone. When stretched to his full height he was about two and a half metres tall. A pair of bulges on either side of the body contained black 'wings', which might have been used for flying when Mercury had an atmosphere. The normal home of these creatures was the Twilight Zone but the minerals they needed for food were exhausted and they were compelled to forage in Night Land. Their body had evolved to resist the cold; they had changed colour to a silvery white because that colour radiates the least amount of heat. On returning to the Twilight Zone they upread their wings, which now acted as heat absorbers.

If I have spent an undue amount of time describing an alien race that scarcely affected man's development at all, it is because I am not really certain that these creatures were entirely alien. In the midst of conflicting reports one voice rings with authority, the voice of Oyarsa, who said we are all brothers (or cousins, at least) in the Field of Arbol. My researches have engendered a kind of Arbolite patriotism which leads me to

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accept these Mercurians as a Chinese once accepted an American—grudgingly, perhaps, but necessarily. But once hyperdrive released space vessels like so many butterflies into every corner of a shapeless continuum, the sense of alienness returned. Mars, Venus, Mercury—yes. But Zetons, for instance. No!

Hyperdrive (or overdrive) made space meaningless. It was not to be used in planetary travel, as collisions at such high speeds in such congested areas were practically inevitable. Yet even hyperdrive took *some* time. The final invention was teleportation which, among other things, made space vessels of any kind superfluous. Lester del Rey tells us that theoretically materials could be transported by this new method to *infinity* in *no* time. This concept is difficult to grasp and both Katharine and myself have spent many fruitless hours trying to work out its implication. It is probably one of the many lost secrets of the Space Era. I will attempt to describe its theoretical basis in a later chapter.

* * *

The politics of the Space Era were largely conspiratorial. Man no longer mattered. He had been growing comparatively smaller and smaller ever since scientific investigation and technological development had allowed him to explore a space which he already knew to be boundless. In the days of Aristotle man ranked next to the gods—and the gods were not far ahead. When the Space Era was in its prime man, although imagining he possessed divine attributes, had become a tool of the machine. At first he had persuaded himself that he controlled the machine, but it became impossible to maintain this illusion. Gone were all the old ideals of freedom, justice, self-determination and evolutionary supremacy. For centuries men had, almost jokingly, prophesied the day when they would be slaves of machines. While they joked they unconsciously slipped into servility. Quite suddenly they realised that prophecy had become reality and that they were faced, not with the traditional internecine struggles of the past, but with a war of survival against an alien race.

I am not referring to the robots. I will deal with them in the next

chapter. I am speaking specifically of man's sense of inferiority in a world which he had always imagined his own. Desperately he threw away all his principles and ideals, all the values that he had adhered to in the past. He felt forsaken. He believed that something had gone wrong with his metaphysical approach, that it was necessary to overhaul his basic thinking. Man's last serious independent effort in the Space Era was not concerned with power or fuels or metals or strains or tensions; it was a recasting of thought, a revolution in words, a defensive strategy that united the new science of semantics with the ancient faith in the Word. He scorned religion out of habit, or adopted formulæ in lieu of experience, yet without recognising the implications he tried to reassert the faith of the Fourth Gospel: 'In the beginning was the Word'.

A tribe of Britons once called in Saxons to defend them against Picts, and were overwhelmed by their new allies. Round about the year 2650 the Terrans (or Earthmen) made a stupendous Machine to defend them against their mechanised enemies. I shall have more to say about this Machine later. It knew all, and theoretically could advise men unerringly. Meanwhile, the Institute of General Semantics was called in to guide the policy of Earth's satellite, Venus. The settlement of this planet had been as haphazard as that of America and Australia. The only principle governing selection had been the extent of suggestibility exploited by Foster Schocken Associates' propaganda. In the crisis facing Earthmen the semantically trained authorities now followed the twin policy of building the Machine at home and rigorously selecting the population for their Venusian outpost. Careful tests were made among the indigenous population and all new settlers had to satisfy certain semantic requirements.*

I have selected this particular passage in Space history (the choice is extremely wide) to illustrate the massive proportions of decision and action in which man was now involved. Not only were they greater, both physically and intellectually, than

* The best authority on this phase is A. E. Van Vogt, *The World of Null-A*. He is very meticulous, and even gives us the population of Venus at that time: 119,000,038 males, 120,143,280 females.

anything known before, but they were also too great for man's manipulation. He was a dwarf in every way. His new philosophy, which he called Null-A,* was regarded by some other systems as a dangerous challenge to themselves. The result was galactic war. There is no point in trying to follow this war in detail. There were no individual principles at stake, as men had known them before. It was one philosophy pitted against another, with fantastic powers ranged on each side. It is impossible to understand how any individual man could have gained any benefit from this conflict; the victory at most could only have been for a philosophy but it is extremely unlikely that the ordinary man ever felt the effects of the philosophy in his personal life.† Opponents of the dominant Institute of General Semantics on Earth planned to conquer Mars and use it as a base for galactic activities. Five thousand space-ships and 25,000,000 men took possession of the cities of Mars. War was not directed against *men* but against the Machine. By focusing a Distorter on it they rendered it helpless to make public statements. In this new type of war man was defenceless. He died in large numbers, but only as a by-product of a more primary conflict.

The universe was theoretically controlled by a Galactic League, but its power over members was relatively weak. Some members were much too powerful to be held in check, e.g., Enro the Red controlled an empire of sixty thousand star systems and only obeyed League policy when it suited him. League treaties forbade the use of Distorters against the Machine, and atomic energy was only to be used as a source of power and for a few other specialised purposes. Killing was defined into categories. If five per cent of a population were killed, a state of war existed. If ten per cent, it was called 'slaughter', and indemnities had to be paid. If the number of deaths amounted to twenty per cent of the population or 20,000,000 (whichever was greater), it was defined as genocide. The Government of the power concerned was then declared

* See chapter 10.

† Rather like some brands of Twentieth Century Socialism. Wealth was acquired by corporations for 'the public' but very little of it filtered through for the benefit of the individual. It was the beginning of 'massivism'.

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an outlaw and those responsible were to be delivered to the League for trial and execution, if guilty.

Having inhibited the Machine's powers of communication, Enro now ordered it to be attacked with atomic torpedoes. The Machine was destroyed but Gosseyn, the creation of the Machine and the possessor of an extra brain (which he had not yet learnt to use), survived to direct the defence of Null-A. Enro also attempted to make Venus another base, occupying it with an army of Altairans, equipped with every conceivable weapon. The Null-A Venusians retreated to the woods, then attacked the Altairan camps by night, armed only with clubs, and overwhelmed them. The Venusians suffered 10,000,000 casualties in four days but the invasion was checked. This was a remarkable victory, akin to Marathon, for the Venusians were unprepared and had not yet even set up a Null-A Government. Even in those days of teleportation and super-electronic brains men could still win victories, armed only with darkness, surprise, congestion and clubs. It was believed at the time that Enro had deliberately ordered the annihilation of the Null-A Venusians so that he might provoke the League to cosmic conflict.

We are, all of us, too far away from these events in spirit to understand them. It is a tragedy in our own settlement if a man suddenly goes mad, picks up a brand and sets fire to his neighbour's hut or his wife. We can't envisage anything more disturbing. I write of space-ships and God-Machines and instantaneous reaction, but I don't really understand them. To the people of the Space Era the important aspect of existence was the cosmological one; we have slipped back to the relatively minor psychological orientation. What we can understand, and without any effort, from this fragment of the past is the enormous degree of hatred that seemed to proliferate in space. The message of love had finally died. Nowhere do we find any expression of the ancient dictum that it is man's duty to love his neighbour. Even when men found a way to live peaceably on Earth they transferred their violence and hatred to the galaxies. It was as though they actually possessed a fund of hatred that they had to release. It was possibly regarded as a great moral

advance when men ceased destroying each other and proceeded to destroy alien races. Bradbury tells us how they invaded a planet called Taollan, enslaved the population and finally destroyed it with a disease akin to leprosy. Then they went on to another world to escape the disease they had themselves implanted. They probably considered they had excellent reasons for doing this, just as the Catholics had on St Bartholomew's Eve. Perhaps some crime such as refusing to wear trousers is really just as worthy of massacre as refusing to revere the Pope. But at this distance of time the reasons look pretty tawdry and the slaughter just as bloody.

I can best illustrate the corroding effects of space hatred by further reference to Hansen's expedition to the Alpha Centauri system. He and his companions no longer acted in a recognisably human way. When stranded on Althan they saw an alien space-ship. Their first reaction, probably understandable, was that the beings inside it might not be friendly, so they hid. It was nothing other than fear that made men the demons of the universe. Perhaps fear governed all relations in space-voyaging, but one can't help feeling that people with normally decent reactions would have openly approached the strangers with a request for help. Human suspicion would no longer allow such a natural act. When they were taken prisoner by men from Sirius (who belonged to the same stock as the Terrans), they could only regard it as a hostile act. The Sirians were perfectly justified in taking precautions in view of the unfriendly attitude of the Terrans. But it was obviously the natural instinct of Earthmen to treat all strangers as potential aggressors. Surely this race of men was damned! They summed up the Sirians after their first meeting as power-hungry, ruthless maniacs. The only evidence they adduced was that the Sirians had cold eyes!! They assumed the Sirians were preparing an expedition to attack Earth, for which there was no foundation at all; they assumed the Sirians were looking for a mineral on Althan which would aid them in their enterprise (this was only an impression); therefore they decided it was their racial duty to destroy the Siriun space-ship.

It is very interesting to note that these men, who were

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members of Space Control, referred with pride to the abolition of war on Earth at some prior date. They saw nothing odd, however, in waging utterly ruthless war on and against other worlds. They managed to capture a Sirium commander and they examined him with the help of his own thought-transference helmet. It is of course possible that he was as merciless and aggressive as his examiners claimed, but I have very little faith in the integrity of these men. From the beginning the Sirium was treated as a rival who must be destroyed, and I cannot believe that he was given a fair trial—if the word 'trial' is anything but a mockery in this connexion. The Terrans simply could not conceive of people who did not want to conquer the universe. Their conditioned minds immediately began to think in terms of 'preventive war'. They did this before the Siriums had given any positive signs of animosity—at most, an understandable mistrust. Having elicited the expected response, the Terrans claimed it was evidence of power-mania. As a result, the Sirium station on Althan was wiped out. Hansen's comment is revealing in its callousness: 'It's saved a heap of trouble'. In all probability it created a mountain of trouble where there need have been none.

Bradbury wrote with conviction of the sense of futility that increasingly pervaded the Space Era. None felt it more keenly than the more intelligent spacemen themselves. (The eternal schoolboys, of course, were not affected.) They drove on and on, never sleeping, eating little, ageing rapidly, never knowing what they wanted. Vaguely they felt they were looking for peace and by a cruel irony they took war everywhere they went. Many of them came to feel that nothing really existed; either space was their medium (but a medium for what, no one knew) or it drove them mad. A few realised that their restlessness dated from the time they forsook God. Even the Churches, still clinging to fragments of their earlier power, were beginning to understand that God was necessary.

And such a pity—for the human ingenuity wasted on this ceaseless turmoil was almost beyond belief. One would imagine that in space the problem of communication would have been insurmountable. But not at all! Deegan tells us that the diffi-

culty was at first overcome by the use of Erriksen vocabularies (I regret I cannot be more explicit) but they were found to be laborious. There seems to be no problem men cannot solve. If only the motivation were more worthy of respect! In this case Professor Mattus invented his thought-transferer, which was an electrical aid to 'telepathy.* It consisted of a telescopic rod, extended when ready for action and held near the subject's brain-case, and connected to a small pack fitted beneath a gravity reactor in Bergmann Mark VI and Mark VII atmosphere suits. A cable ran to a molybdenum plate fitted in the helmet, which at the touch of a switch snapped into contact with the operator's forehead. It all sounds so natural and easy once you know how.

Knights of Space, the popular writers liked to call them—they themselves kept quiet about it. They knew that, just as the populations back home were trying to shelter behind the Machine, so they themselves were adjuncts to a fabulous mass of scientific apparatus. Of what use was the human retina except as a station on a relay? They flew and they lived by images on screens: radar, telescopic infra-red, ultra-violet, cosmic-detector. Their speech became incomprehensible to the Earthfast. To quote one of their number, 'Everything is about as clear as a jarful of Zenna swamp-mud'. Where is Zenna? We no longer know. In what way was its mud more opaque than our own familiar mud? One guess is as good as another. They created their own personal cosmogony and decorated their speech with alliterative oaths: 'Grieving galaxies', 'Stuttering Sirius', 'Almighty Altair', 'Blazing Betelgeuse'. Young and lively, optimistic and excitable, they signed up as crews and technicians, every third man of Scandinavian stock—or so it seems to me. But what happened to them? When the thrill had worn off, and their work was as much a routine as that of an old-fashioned aeroplane pilot or bus driver, and the sense of futility overcame them—what then?

In many ways it was a queer, almost monastic existence, with nearly every man an adolescent. I suppose humanity might

* Telepathy is a latent faculty in all of us, but few know how to use it unaided. Only a few Mutants were true telepaths.

have developed in the opposite direction, i.e., feeling at the expense of cerebration. In this world the ability to command natural powers was the only one held in respect. Emotion was regarded as a hindrance and was rigorously inhibited. Nothing was more damaging to a spaceman's career than the suspicion that he was subject to 'feelings'. The keyword was 'objective', everything had to be capable of exact measurement, wrong decisions were preferable to vagueness or uncertainty, the imagination was considered 'unsafe'. Of course, men have always claimed that they are distinguished from animals by their intellect and that if the intellect had not developed as it had men would have remained animals—but what they never acknowledged was that they might have possessed an emotional and mystical life far in advance of anything the animals know.* The process that had been given its first major encouragement in the time of the bathy invasion, when a deliberate selection of intellectuals had been made for survival (though unconscious selection had been going on for decades previously), had now reached its zenith.

The human mind has proved itself immensely flexible and resilient. It could not have survived the impact of atomic war, planetary invasion and the immeasurable strain of super-powered 'services' which destroyed all hope of solitude and quiet had it not been tougher than the toughest alloy used even in space travel. It was the pioneering, unprepared space pilot who rocketed into the unknown and met more frightening terrors than the dragons and cannibals of the past. One of the most poignant stories of all is told by James Blish in *Common Time*, of the first pilot to venture to Alpha Centauri—where the most horrifying of all space diseases nearly drove him out of his mind. Everyone had known and anticipated the enormous distances and colossal dimensions of space—but no one had given a thought to the unending monotony of the journey. Until satisfactory adjustments could be made, the first pilots sat as if glued to their controls—rigid, sterile, unchanging, lifeless. What followed later came to be known as the spaceman's typical psychosis, his personality was flooded by the environ-

* As, of course, they did until (say) the Twenty-Second Century.

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ment and became rigid too. On all overdrive journeys there was nothing to see, really nothing to do except in an emergency—and there was no communication because the ship travelled faster than light. Then came the moment when the spaceman discovered he couldn't move, when his instruments appeared fixed. First of all the time rate slowed almost to a standstill, one second of ship time actually becoming two hours of passenger time. Later the rate swung to the opposite, leading to a fantastic racing and eventual blackout (known professionally as the 'pseudo-death'). It is little wonder that many spacemen began to doubt reality altogether, without having the intellectual equipment to rediscover the ancient theories of ideality.

The mechanisation of psychological processes, already referred to, was in fact the weak factor in the structure of these people and their astonishing civilisation. Mental changes are so slow, so undramatic, so unsensational, they are rarely noticed by contemporaries. Yet, like an insignificant beetle, a mere habit of thought was gnawing away the foundations of society. It is easy to see why the Space Era was followed by a technological decline which it was quite impossible to check. The human mind approximated more and more closely to a cunning machine which responded superbly and instantly to certain selected stimuli—but was dead to a host of others which it had formerly obeyed. All the old and normal flexibility, essential for meeting new situations, had been smothered. Men were now talking as you might expect machines to talk. Articulation was excellent, logic acute, imagination absent. Thought followed well-ordered and well-worn lines until at last the areas between each line became unknown wildernesses and actually unnegotiable. Any catastrophe, even a minor mishap, could present insoluble problems.

In conclusion, a few words about the other inhabitants of the universe. This book is about men and other races only find a place in it as curiosities or because they affected men's destiny. I am an historian proper, not a natural historian. But these strange and distant races are once again cut off from us, no more than memories, no matter how robustly they may still

exist. Do the continual electric tempests still rage around the planet Zeton (on the fringe of the Appalachia)? Do the charges still fuse the ground, converting it into solid lumps like glass? Who now rules Zeton?

Let me say a few words about this planet, discovered by Hartnell, Goss and Deegan, leaders of an official expedition, and reported by the latter in *Planet of Power*. The inhabitants were like huge starfish, measuring three metres from point to point, with varying numbers of arms (from five to seven). They pulled themselves forward by alternate exercise of limbs working in threes. Two eyes on long curved stalks swayed in compensating motion. They were able to throw powerful electric shocks from their extremities. By linking together they could intensify the shock and burn one of their own number to a cinder. (This was their method of execution.) They had a caste system based on the number of arms. Five-arms were servants, seven-arms were bosses (they had stronger electrical emanations). There were two co-rulers. They lived and worked in metal surface-tubes, semi-cylindrical in form. They ate foul-smelling lichens and a kind of pink slug (alive). The slaves worked in chemical foundries far below the surface. They had the typical slave mentality, a compound of hopelessness, blind obedience and fear of their masters. In the power-house the slaves fed electricity from their bodies into the city's wiring-system. Food was short and the Zetons wanted generators so that they could dispense with their slaves. These slaves actually carried out a successful revolt at the time of the expedition's arrival—which suggests that they were not quite as servile as Deegan supposed.

But the interesting and instructive thing is to witness an utterly alien race facing and overcoming exactly the same problems as the Earthmen. On Zeton a man was once measured by the number of his arms. On Earth it was once the colour of his skin. There was a time in France when groups of men became notorious for their lack of trousers while others pampered their rumps with velvet; later in the Argentine wise men gave away their shirts so that they should not be confused with those who flaunted flannel. It is in this way that living, intelligent beings,

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whether men or Zetons, distinguish among their kind. And one last consideration. Were the Zetons also the children of God? Did He, out of His infinite mercy, send them a Messiah also? Was there a Calvary, with five arms nailed to star? And were wars fought to decide whether He was present in the sacrament or in spirit only? I ask these questions because there is a record of one ship which landed on a planet (Planet Forty-Three in Star System Three, we are told) just after the long-awaited Messiah had at last come. Eight members of the crew chose to stay.

The March of the Robots

ONE OF THE most characteristic features of this rumbustious period was the perfection of the robot. The automatic slave had been a dream of man for many centuries. Its advantages seemed obvious: servants without nervous systems, without temperaments, without an incipient sense of right and wrong, without imagination and the capacity for love, uncreative and at the same time not tempted to destroy an unjust order.

The earliest experiments were so disappointing (each robot had to be directed and supervised, so that only the physical problem was solved—human beings were still left with the onus of thinking), robot research was practically abandoned for a period and an attempt was made to create the equivalent from human material. The kind of society described by Orwell in 1984 and foreseen by Gheorghiu really aimed at the robotisation of perhaps the greater part of the population. Now psychological techniques made it possible for a human being, if caught young enough, to be conditioned for any role (below a certain level of achievement) which the rulers considered desirable. An even more potent weapon was beginning to be utilised towards the end of the Twentieth Century. This was the production of ectogenetic children, who were not affected by mother-love or normal family sentiments and could be trusted, as the result of careful training, to be completely self-regardless. Means were discovered of keeping an ovary growing in fluid for twenty years, which would produce fresh ovum every month, ninety per cent of which could be fertilised. J. B. S. Haldane, in his *Daedalus*, tells us that this method was first

adopted officially in France, where the low birth-rate had prepared people for such a necessity.

Opposition in other countries was at first strong, but the disasters of the late Twentieth and early Twenty-First Centuries tended to sweep aside traditional prejudice. After Britain, for instance, had recovered from the Fourth World War and technology had reasserted its prestige, even more strongly than before, we learn that only about thirty per cent of all children were being born of women. Selective breeding was regarded by many people as a panacea, especially after the selective salvation that preceded it. Religious bodies objected, though not on religious grounds. As the religious sense became attenuated the Churches came to be regarded primarily as the guardians of a moral code, often a code which had lost its relevance under the new conditions. Above all they claimed that the family must be safeguarded, and it was the family above all that suffered from the new trends.

Ectogenetic and selective breeding came to be regarded as a commonplace. The original stimulus for this movement, the desire for willing slaves, had now disappeared, or rather the nature of the problem had changed. Populations were much smaller and survival depended on the most economic use of all resources, human and material. The humanity that had survived atomic fission and bacteriological warfare was predominantly cerebral in type; a deliberate attempt had been made to excise the less intelligent and the more contemplative genotype from the social body. If comfort (the main good) was to be achieved, it could not be done by the harnessing of human muscle on the pattern of the civilisation of the past, because there was not enough of it. The more advanced countries banned individual procreation and it became a criminal offence to produce a child without a licence. At first sight this may seem odd in a society suffering from greatly reduced numbers, but the new rulers were determined not to go back to the old haphazard methods, resulting in a vast but mentally debased population. A small proportion of men and women were selected as ancestors for the following generations, and from the short-term point of view this experiment seemed well

justified. Human quality, physical and cerebral, was maintained at a remarkably high level, and it was this factor, more than any other, that permitted the ruins of 2005 to flower (if such a word is adequate) into the remarkable blossoms of Gosseyn and Enro the Red. Haldane noted that this carefully selected and conditioned population rapidly revolutionised communications and produced an amazing ingenuity in methods of theft, embezzlement and other refined types of crime. The ageing Churches safeguarded their moral codes so adequately that the codes were rarely to be encountered outside their handbooks. The new race was morally neutral and their crimes were as brilliantly executed as their space voyages.

But there was still donkey-work to be done and attention was concentrated once again on the possibility of creating mechanical donkeys. There was no problem of this kind that the new race could not solve. The first successful robot was actually built before the new ectogenetic reforms had been introduced. Those who came to know of it were horrified by its possibilities and every effort was made to keep its existence quiet. This is in great contrast to the attitude of the later race, who were never frightened by any material power, and consistently regarded every challenge as a laboratory problem which could be solved by the application of well-tested principles.

Lord Dunsany, an old-fashioned historian who believed in the individual, gives the story of the first robots in a book ironically entitled *The Last Revolution*. (Dunsany participated in the events he described.) They were very clumsy constructions in appearance, being merely a round shape of steel, like a crab the size of a big dog, with a hundred arms and four legs. But they were very intelligent, could play chess like masters and they could make duplicates of themselves. They surpassed the most skilful human being in their ability to perform several quite complicated operations at the same time. No one, not even the inventor, Ablard Pender, knew what these creatures might be capable of. No one had guessed, for instance, that they would have the power of communicating with other machines, which were now seen to be inferior robots rather in the way that apes might be called inferior men. During the period when the robots

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were in revolt there were many cases of irregularity in the work of previously dependable machines. But the essential danger of robots had been foreseen from the earliest days; they were soulless and possessed no moral sense. This did not matter so long as they were under human control, but as soon as they rivalled or even surpassed men in intelligence it became a serious matter.*

Not even Pender could understand how his robots communicated with each other. That was the frightening thing, he had made something greater than he knew. He thought they passed messages in the manner of a queen and her termites, but it was only a guess. But whatever the secret, it was something man could not do himself. There was some faculty in the metals of which the robots were made that was not possessed by men. It was a warning.

The robots very quickly revolted. One of the original purposes of robot-invention had been the desire for slaves without ambitions or grievances or emotional systems. It is impossible to say whether these things were possessed by the early robots—but they must have felt dissatisfaction at least. They besieged Pender and some friends in a cottage on the Thames marshes outside a little town near London. One advantage the robots possessed over men was that they only required one material for the maintenance of complete efficiency: oil for their mechanisms. The attack on the cottage was in fact an attempt to gain possession of the only stocks of oil they knew of. It was soon discovered that firearms were ineffective against their hard shells, but water was a deadly weapon as it rusted them. An attempt was made to bring up artillery in the belief that the robots could be blown to smithereens, but this incident illustrates superbly the failures that may follow when one is dealing with the unknown, for the guns were thrown out of action by the robots' telepathic commands. Cars and buses became unmanageable in the affected area, the railways and telephone system ceased working, and clocks and watches began to race

* Cases of robots exhibiting jealousy were recorded, but the nobler qualities were absent.

or go backwards. The robots were finally defeated by liberal doses of water.

I believe that these events occurred shortly after the 'Martian' invasion. If so, man's inadequacy was brought home to him twice in fairly quick succession when two of his enemies were dispatched, not with the aid of complicated scientifically operated weapons, but by the two humble agents of water and microbes. I sometimes wonder whether the semi-mechanical 'Martians' did not have the same effect on men's mechanical aids as did the robots. It ought to be astonishing, but unfortunately isn't, to learn that very little heed was taken of this distressing first experience of automatic robots. The complacent attitude expressed in the phrase, 'Everything will turn out all right in the end', prevailed. Those concerned most closely with these events, Dunsany himself and Pender (though grudgingly), realised firstly that the revolt of the machines had been potential for a long time, and secondly that the failure of these robots had not eliminated the possibility of a similar and perhaps successful revolt at some later date. But no one else took much notice. As I have said, the revolt received little publicity. People must not be frightened.

It is perfectly natural for men to believe that they should be able, in the nature of things, to control anything they create themselves. Dunsany had something to say on this point:

These slaves of ours are not likely to be content to serve us any longer, when they are given again the cunning that Pender gave them to use their enormous strength. There are machines that could easily crush a hundred men, if only they knew how to escape from obedience to the hand of a single man. We are not clever enough to teach them how to do that; but I fear we are rash enough, if one of us is again able to teach them. And one of us may. For among every hundred million of us is one man of whom we can predict nothing. We cannot say what he will do; and it is impossible for us to say what he is unable to do.

Existing machines had the physical power. Once a calculating machine with sufficient genius had been invented the other machines would be freed and mankind would then be overwhelmed.

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Poor Pender returned to farming. He had been so deeply affected by his experiences he refused to use machinery of any kind, until the County Agricultural Committee threatened to take away his land because it was not being worked efficiently. But there is no information that his theoretical work was ever destroyed. It is possible that his researches were used in the making of Una, the most famous of all the early robots, and an English girl at that. The invention of a scientist named Dixon, she was a strapping creature, a worthy metallic successor to Hilda Hourli. John Wyndham described her as

a dark, conical carapace of some slightly glossy material. The rounded peak of the cone stood well over two metres from the ground; the base was one and a half metres or more in diameter. The whole thing was supported on three short, cylindrical legs. There were four arms, parodies of human arms, projecting from joints about half way up. Eyes, set at some six inches below the apex, were regarding us steadily from beneath horn-rimmed

Una was interesting because she had been given sex, a quality that most robot-makers rigorously excluded. In fact, owing to a mistake in her hormone requirement, Una turned out to be much too highly sexed for normal purposes, and had to be destroyed.

The first efficient American robots all went mad. Their English prototypes had been much simpler; they had sufficient intelligence to get out of hand but not enough to become unmanageable. The Americans aimed at producing highly complicated thinking machines that would relieve their masters of all work, mental as well as manual. But the early models were too complicated and after a few months began to behave erratically (neurotically, in human terms), giving wrong answers to the problems they were set to solve. The natural thing to do was to break them up and try again but this was impossible as they were made of indestructible duraloy. In the end they had to be buried in concrete. Even today, somewhere in the American continent, set fast in subterranean concrete, lie twenty-eight robots, presumably meditating on the eternal bitterness of their fate or possibly still waiting with inhuman

patience for the first sounds in nearly twenty centuries that will prelude their release.

During the Space Era the robot was perfected. It was sometimes difficult to determine what actually constituted a robot. In a sense, one's house became a robot whose sole purpose was to serve. The typical house of the Twenty-Seventh Century (when technological achievement reached its peak) was nothing like the dead shell we know today. The house spoke, thought, listened, acted, entertained. The walls could dissolve into a three-dimensional scene of jungle or veldt, anything you liked, a scene from a fairy-tale or from a romance, with animals and vegetation to match, smells, sounds, hot sun, cold snow. The walls were not quite alive, but they were at the next remove: made of crystal, played on with dimensional, super-reactionary, super-sensitive colour film and mental tape film behind glass screens, plus odorophonics and sonics. Inside the house was an automatic scrub bath. The dining-room table produced dishes of warm food from its interior in response to commands, which it acknowledged. All communications were televised. Each room was telepathic, catching emanations and creating whatever was desired. There were no stairs. People walked into an air closet and a draught sucked them up to the next floor. Shoe-tier, tooth-cleaner, hair-brusher, picture-painter, suction-mail tube were limbs of this extraordinary creature. The house itself became wife, mother and nursemaid to everyone inside it. As the robot or the robot-house became more efficient, so it became more indispensable. People began to feel unnecessary. Alarmist writers had often written of a world where robots should supersede people, but the real crisis occurred when people began to feel there was no justification for their existence. It would have been excellent if men and women, released from arduous toil, had indulged in creative activity, as had once been naïvely hoped. But of course they didn't. They merely smoked more, drank more and took more sedatives, and relieved their feelings in curses when a gadget went wrong and left them temporarily helpless.

The robots bring to light a strange characteristic of our race. Ever since men had dreamt of robots and long before they had

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been invented, the complications that it was known would accompany their use had been foreseen: the frustration, the sense of aimlessness, the excess of leisure, the corruption of the children.* But no one ever settled down to work out the answers. Once again the attitude was summed up in the phrase, 'It will come all right in the end'. Men are always willing to trust to luck, to hope for the best, even when it is perfectly clear that the best cannot possibly come unaided. Men trusted that the psychological urge that had produced the problems would somehow, miraculously, produce the solutions too. Any intelligent man of 1950 could have foreseen the problems; in 2650 they were still unsolved. At no time before the final impasse was reached were they ever willing to retrace their steps. In the end they were compelled to but first of all they passed through a spiritual hell of their own making.

The perfect robot was too close to humanity for the latter's comfort. There was one factor that emphasised man's distrust of his new assistant, and that was the evolution of a hybrid, neither man or robot, but a bit of both. It was often difficult to know where one ended and the other began. You might be filled with a kind of racial fury against a being which, you felt, was usurping your place in the world, but your fury would be frustrated and you would be driven to tolerance by the existence of another, similar creature which you had to admit was human. (The term humanoid was often used to designate these odd beings.) This situation was the direct result of war and accident combined with the perfection of plastic surgery and mechanical aids. Old soldiers on wheels, well-dressed ladies whose nails on their plastic hands were superbly manicured, became familiar sights. The most remarkable of these semi-human constructs is described by Henry Kuttner in *Ahead of Time*. A human being who had been badly mangled in an accident yet remained alive had various mechanical devices grafted on him. Such operations were not common but were resorted to when there was extreme mutilation. The new species thus evolved was called Transplant. The resultant robot possessed only partly

* See next chapter.

human responses. His 'body' consisted of a cylinder measuring about two-thirds of a metre in each direction; this contained the brain and double lenses. Food and drink were served into a special metal compartment and were emptied on a signal. Transplant had the faculty of taste but did not digest its food. (Scientists claimed that digestion was not necessary but was merely an old-fashioned habit.) Electronic vibrations replaced neural ones. First of all impulses were changed into familiar images but later it became possible for the 'self' to apprehend and recognise directly. Alcohol had no effect on it, but it was stimulated by electric charges. Intellectually Transplant was more efficient than the normal human being but was handicapped by the absence of telepathic functions (which were greatly developed during this period in the human being).

Fear of the robot was increased when it was discovered that, unlike the human being, it was not adversely affected by atomic radiation. (I have already mentioned one planet where only the robots remained after an atomic war.) It was first noticed on Earth during an attack on an American city when nearly all the human beings died while the robots survived. The robots themselves began to take an interest in the outmoded theory of the survival of the fittest. Everything seemed to point to humanity as an outmoded form, not so much of life as of action. Men had always prided themselves on their primacy among living creatures. It is a nice point to decide whether robots qualified as 'living' creatures. Perhaps the emphasis was being shifted from organic processes to action—and as performers of active and intellectual processes the robots were leaving men behind.

In fact, the manufacture and use of robots created far more difficulties than they helped to solve. Any intelligent person could foresee that, but men of the Space Era took risks haphazardly, and then tried to find the correct precautions when their very status was being challenged. The production of robots, for instance, should have been rigorously controlled. In fact, any commercial firm had the right to build them, and when they offered to duplicate your friends or anyone else you liked to specify, they were blithely undermining society itself.

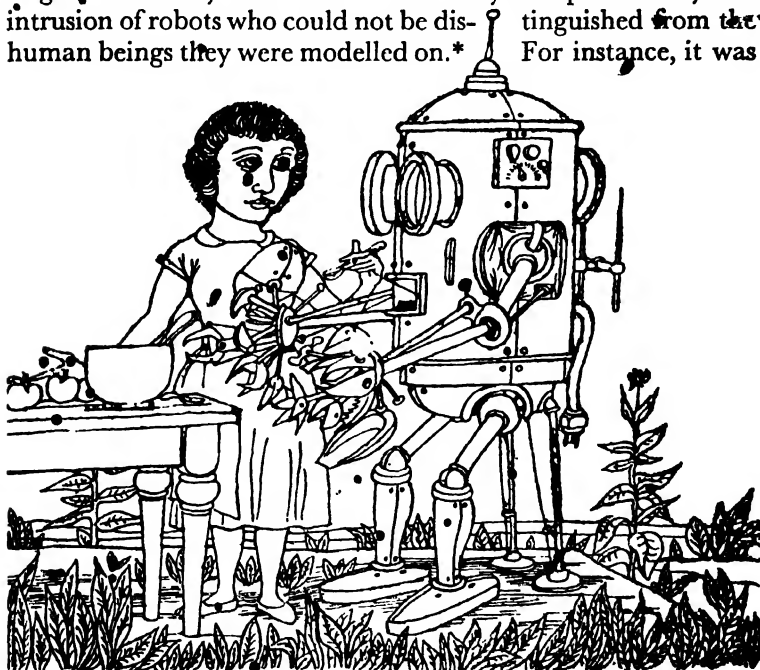
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Here, for instance, is an advertisement which appeared in an American newspaper:

MARIONETTES INC.

Duplicate self or friends; new humanoid plastic guaranteed
against all physical wear.
from \$7,600 to our \$15,000 de-luxe model.

This firm actually started its first experiments in 1988. The later models were perfect and were built to perform all natural functions. It sounds like an amazing toy and, within reason, might have remained one. But it provided such an apparently easy way out of some difficult situations that it rapidly became a menace. The robots became so human that whatever the original difficulty had been it was only complicated by the intrusion of robots who could not be distinguished from the human beings they were modelled on.* For instance, it was



Transplant comes to dinner

* Especially after it was discovered how to endow robots with 'memory', whether genuine or induced.

not uncommon for a man to duplicate himself so that he might appear to be keeping his wife company while in fact he was seeking consolation elsewhere. But a clever trick became a serious problem when the too-human robots started falling in love themselves. Men had to learn that if you give your creations hearts and livers and neural systems and alimentary canals they will almost certainly develop the passions with which these organs are associated in human beings.

There was a Baroque period in robot production, as in all arts. As the manufacturers reached perfection they abandoned restraint and behaved like drunken gods. Bradbury tells us of one old eccentric named Stendahl whom he compares with the Eighteenth Century Gothic-fanciers, and who had made a collection of unusual robots:

The robots, clothed in hair of ape and white of rabbit, arose: Tweedledum following Tweedledee, Mock Turtle, Dormouse, drowned bodies from the sea compounded of salt and whiteweed, swaying; hanging blue-throated men with turned-up, clam-fresh eyes, and creatures of ice and burning tinsel, Ham-dwarves and pepper-elves, Tik-Tok, Ruggedo, St Nicholas with a self-made snow-flurry blowing on before him, Bluebeard with whiskers like acetylene flame, and sulphur clouds from which green fire snouts protruded, and, in scaly and gigantic serpentine, a dragon with a furnace in its belly reeled out the door with a scream, a tick, a bellow, a silence, a rush, a wind.

The case of Stendahl is the most celebrated in the history of robots, and is comparable with some of the careers of Italian Renaissance princes. Having made doubles of all his enemies, he called them together and killed them all, while everyone else laughingly believed that he was dispatching the robots. Nothing could emphasise more pointedly the lost uniqueness of man. The Great Neurosis of the latter days of the Space Era owed something to this startling proposition: that conceivably Space had been conquered for the benefit of a new race of robots. The suspicion that all men's proudest achievements were in fact stages in the process of his own destruction took hold of the mind of man—with what paralysing effect I hope to show in the following two chapters.

From Pain to Pleasure

I HAVE ALREADY mentioned how the decay of religious feeling was followed fairly rapidly by the stifling of political emotion in the centuries between the Fourth World War and the rise of New Crete. This period lasted for roughly twelve hundred years, and I have yet to describe the final flickerings of the political instinct. The vacuum left by the departure of religious and political ideals was filled by two monoliths, Power and Pleasure. In this chapter I intend to describe man's quest for Pleasure as the final mass good: Power was the reward of the élite. Not only did these centuries seek Pleasure more fervently than any previous ones, but their equipment was richer than anything known before or since. Philosophers saw history as an advance from Pain to Pleasure, but the seekers learnt that men dwell on a pendulum and that no sooner have they discovered Pleasure than they swing back abruptly to Pain. The great discovery of this period was that Pain is the backside of Pleasure.

The nature of humanity had been immensely widened by the pressures of the age. I have already referred to the physical mutations that followed on the period of atomic warfare, and which still linger among us. These were expected by atomic scientists and biologists but another group of mutations seem to have taken humanity by surprise. This group resulted from the acceleration of evolutionary factors consequent on the 'conquest of space'. In space the human being was subjected to a constant and intense cosmic ray bombardment, with its natural effect on gene structure. When five consecutive months were spent in space (as happened on any journey between Earth and Venus) no human being was physically or mentally

quite the same person at the end of the journey as he had been at the beginning. Mutations were therefore far commoner on Venus and Mars and among space crews than on Earth. The more volatile genes were the ones which received the impact, with the result that a wide variety of Mutants came into existence, depending on the gene structure of the individual.

Eric Frank Russell listed twelve dominant Mutant Types in his *Sentinels of Space*, with two others which appeared to be evolving at the time he wrote. I will refer to these briefly as in the course of what follows it must be remembered that human beings were no longer predominantly 'normal' but increasingly numbered among them various types of 'abnormality.'

Type One was the True Telepath, who differed from the Sub-Telepath because he could close his mind at will, Type Ones always recognised each other at first contact, just as a normal man (referred to as a Pawn by Mutants*) could recognise another because he was not blind. It was possible for Pawns to build in screens against Telepaths, but without a screen they were powerless to hide their thoughts. A True Telepath could feel his mind being probed by another. He could also read the mind of an animal.

Type Two was a Levitator, known popularly as a Floater.

Type Three was a Pyrotic. He could cause automatic combustion in distant objects without physical contact.

Type Four was a Chameleon.

Type Five was a Nocturnal, who did not require sleep. They appear to have been a restless crew, however, for they had not learnt how to use the additional waking hours they had been granted.

Type Six was one of the most interesting, and was known as a Malleable. They were able to assume whatever facial structure they pleased.

No radical alteration of the general physique. They can do nothing really startling from a surgeon's viewpoint. But they've been born with faces backed with cartilage in lieu of bones, are incredibly rubber-featured and to that extent are good, really good. You would kiss one thinking he was your own mother if it struck his fancy to look like your mother.

* Pawns referred to all Mutants as 'skewloys'.

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Type Seven was a Hypno. He could stiffen a man into immobility, erase the incident from his mind and substitute false memories for the period.

Type Eight was a Supersonic. I have no information on him but imagine he could hear sounds beyond the aural range of normal men.

Type Nine was a Mini-Engineer. He appeared to be practically blind for the ordinary purposes of living. His eyes could not see normally, they were too short-focused to photograph clearly anything more than ten centimetres from the tip of his nose. But in those brief limits he had microscopic vision. It was said that he could build a seven-year radium chronometer which would serve as the centre jewel in a diamond ring!

Type Ten was a Radiosensitive.

Type Eleven was a most unexpected creature, known as an Insectivocal. He could 'converse in low, almost unheard-of chirrups with nine species of Venusian bugs, seven of them highly poisonous and willing to perform deadly services for friends'. Such Mutants virtually possessed huge private armies. One of them described with relish the process of death by bug:

These midges can do mighty unpleasant things to a man. They can make his legs swell until each one is thicker than his torso. The swelling creeps up. He becomes an immense elephantine bloat utterly incapable of locomotion. The swelling reaches the heart, at which point the victim expires somewhat noisily. But death does not halt the process. It goes on, makes the neck twice as wide as the head. Finally it blows up the head to a ghastly balloon with hairs scattered singly across its overstretched scalp. By that time the button eyes are sunk four to six inches deep.

Type Twelve was a Teleport, who could cause objects to move without physical contact.

The two Types which were believed to be evolving were a Pyrotic with extra-sensory perception (a mixed Mutant, believed at first by geneticists to be an impossibility) and a Bio-Mechanic, who could service himself with spare parts. This Type was first brought to public notice when a man who had lost a hand in an accident began to grow a new one.

It must not be imagined that these Mutants were supermen.

Superior powers were not always accompanied by superior brains. Many Telepaths, the commonest type, were definitely sub-normal in other respects.

There are Telepaths of such acute receptivity that they can probe your mind way out to the horizon yet are so inherently dim-witted that they've trouble with any thought more abstruse than c-a-t spells cat. Mutants are humans with all the faults and follies of humans.

It is clear, however, that the existence of these Mutants made human society much more variegated than it had been before. If their powers had been used for good they could have solved all man's major problems. But morality was not affected. The only result was that there was more efficiency in every department of human behaviour, whether its motivation was good or evil. A Pyrotic could burn a saint as easily and as willingly as a sinner. An army of Venusian bugs would attack the forces of law and order as eagerly as a hive of gangsters. A few of these mutations are still to be found among us—only yesterday a Floater amazed me by jumping the Nile! Until I had the good fortune to begin my researches I imagined that such people were special agents of the Powers, or even incarnations of the Powers themselves. But mutations require constant stimuli to persist. Without the stimuli they tend to fade from one generation to another. In general the Mutants only intensified man's experience—although one of them, known as the Slan group, almost certainly set mankind on the road to recovery after the Space Era had spent itself in meaningless activity. I shall deal with them in some detail in the next chapter.

The true symbol of this period was the gadget. The spaceship itself was a super-gadget. The only end men seemed to set themselves with any clarity was the elimination of at first muscular, and later mental, effort. The production of robots was at the centre of this process. Man's work was to be done by mechanised slaves and he measured his progress by success in this field. He did not stop to consider the explosive danger inherent in a situation of almost continuous leisure. Unless the leisure could be filled the result was certain to be boredom of an intensity unknown before. Failing to use his leisure in any

fruitful or significant way, human life degenerated into a mess of intrigue and conspiracy, where every effort was made to gain the advantage in a game which had no purpose. We read of a typical middle-class home where a voice from the kitchen ceiling announces: 'Today is August 4th in the city of Allendale, California. Today is Mrs. Featherstone's birthday. Today is the anniversary of Tilita's marriage. Insurance is payable, as are the water, gas and light bills'. This is very clever. It gave the householder and his family a sense of power over their environment. But it sapped their mental abilities in the most trivial field of existence, it atrophied their memories (probably one of the major faculties men possess and animals do not) and it made them dangerously complacent. If it was raining a weather box on the front door chanted: 'Rain, rain, go away; rubbers, raincoats for today'. Even the minor effort of looking out of the window was rendered unnecessary. And, more insidious, there was an undercurrent of childishness which weakened the adult attitude which is so necessary in the struggle with environment. By his own ingenuity man was preparing to lose those gains he had already made.

Much of this was deliberate. Although childishness is the mark of the Space Era, no one ever understood its value to a ruler better than Alpha, a late Twentieth Century dictator, to whom I shall refer again when I deal with theories of government. Alpha actually regarded his subjects as children and, like a benevolent father, he wished them to be happy. This was the tragedy of later history. Only by intensifying adulthood, by a constant flexing of the adult muscles, an unceasing utilisation of the adult nerve-ends, could men maintain their control of the environment. But Alpha, perhaps in good faith, set a fashion which others after him adopted as unquestioningly as once before rulers had adopted the tenets of Machiavelli.

'I want my children to be happy' [he said] 'and the world is my family, and as they are children and want to stay children and are wise in wanting that—that is the whole of my discovery in a nutshell—they don't want to grow up and there is no need that they should. I take care that not only should they not be troubled by questions they can't understand and problems which make

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them suffer for no purpose, but also that their pleasures should be rationed to them, always enough, always some little treat and change coming to them, but never a surfeit'.

It was Alpha who set on foot the headlong pursuit of pleasure. He did what the old Russian Tsars had wanted to do but had not the means to do. The world that followed Alpha developed his ideas—but it forgot his wise warning about surfeit. Disciples never adopt the whole of a master's teaching.

Life became too easy, too garish in a sense. Man's smallest need was catered for. Food is a major need, and automatic cooking became a commonplace. But they went farther than that. They invented a canned food which heated automatically when the tin was opened. But suppose you did not want it hot—then a touch on a button ensured that it would remain cold. Each can contained a combined fork-spoon utensil. But suppose you couldn't be bothered. The ration was made of a consistency that made the use of fingers practicable and not particularly messy. No detail was too small for the commercial mind of the Space Era. And the connoisseurs were not forgotten either. They could control the heat of food before them by a touch. No messing about with thermometers or trying things out with a sip. The dishes were made of a material which registered different temperatures by a change in colour. You operated a resistance switch under the table and set your dish glowing deep red, rose pink or silver white. You got to know by experience which colour made the food most palatable to your taste.

Possibly the appearance of the Mutants set men thinking of similar amusements in the animal field. An invention called the Cic-Fax allowed artificial insemination of one species by another through chromosomic inflexion. Some of the results of this toy were considered rather charming: a bear-rabbit, a vulture-nightingale and a man-mandrill coming in for especial praise. It is possible that the first two still exist, though I have not been privileged to see them. The man-mandrill, however, proved to be incapable of self-reproduction.

One could fill a book with a mere catalogue of these inventions and gadgets, but it would not increase our understanding, pleasure or disgust, depending on your reaction. Before

mentioning what I consider the supreme achievement in this field I should like to touch on one toy which throws light on the mentality of these people, and the queer atmosphere of distrust in which they lived. Today, if I wish to go out in the dark I carry a lighted flare. Long ago it was common to carry an electric torch. But any kind of torch has one disadvantage if you do not trust your neighbours. It can be easily seen and everyone knows where you are. This disadvantage was overcome by the invention of 'black light'. Your torch threw a beam of light which was of exactly the same colour as the enveloping darkness. How, you might well ask, could such light be of use? The answer is simple, even if the secret has been lost. The torchholder wore rectifying spectacles which transformed the black into white light. In such a society, however, it seems certain to me that no one ever went out at night without his rectifying spectacles, for without them he would be surrounded by invisible fellow-men, the most dangerous form of life ever known.

But all these gadgets and inventions were merely the product of ancient discoveries, some of them dating back to the Eighteenth Century. They required no new knowledge but came from the development of existing knowledge. The Space Era did, however, discover one previously unknown natural law. It was accomplished during the Null-A period (Twenty-Seventh Century). From this fact alone we may deduce that there was still a vein of creative intelligence persisting at this comparatively late date. Although the seeds of decay had been sown long ago the most astonishing fruit of the period was a late arrival. This is by no means unusual in human history. Some of the greatest scientific works of the Ancient Greeks belonged to the period of decadence. (It is, of course, possible that scientific enquiry is a sign of decadence.) The art of Italy has always flourished most in periods of political and social corruption. The same is true of Russia. The new law I refer to was defined thus:

If two energies can be attuned on a twenty-decimal approximation of similarity, the greater will bridge the gap of space between them just as if there were no gap, although the juncture is accomplished at finite speeds

This innocent-seeming pronouncement had the most amazing consequences: it implied that the removal of an object from one place to another, however distant, could be achieved almost instantaneously. It also reconciled Platonic uniqueness and observed identicals. Acting upon this knowledge the Null-A's were able to accomplish what appeared to be teleportation, and was in fact mistakenly referred to as such on many occasions. The effects were similar but by no means the same. A teleport could remove objects by psychic pressure, but the removal was by no means instantaneous, not even approximately.

A society that could still organise research of this range and character was by no means utterly contemptible, but the roots were being steadily gnawed away. While Alpha and his successors regarded their subjects as big children and in fact transformed them into pseudo-children, the actual children tended to be forgotten—or worse, smothered by unintelligent solicitation. The philosophical progenitor of this society was a psychologist named Sheldon, who was to the Space Era what Aristotle had been to the Middle Ages, and Marx to the abortive Communist Revolution. He neatly analysed society into three basic types (on whom, of course, the Mutants were later imposed). The mass of men were the visceros and somatos, who could easily be kept quiet by satisfying their simple needs. Society was controlled by the cerebros, who managed to keep up a strain of adult behaviour while the mass had sunk into juvenility. But what they did not take into account was the fact that not all men were at the same stage of vital development, that millions of children and adolescents were not fully-fledged cerebros, somatos or visceros, but were something else, undeveloped, latent and only crudely catered for. The rulers understood and provided for their 'children' but almost totally ignored the 'children's' children. The result was that each new generation of adults tended to diverge increasingly from a norm established at some time in the past—and as the years went by, a more and more distant time in the past.*

* This most certainly could not be construed as an attack on the adequacy of Sheldonism. It seems to me that it was only partially applied in social therapy. The resentments of the children were a poison being constantly injected into the

In the previous chapter I described a typically robotised house, and commented on the importance given to the nursery. Superficially the parents never stopped thinking of their children, but on the contrary showered them with gadget-blessings. The original idea of sensitised nurseries had been to enable patterns left on the wall by the child's mind to be studied. The practical result was that the child became so fascinated by his nursery it replaced the parents in his affection. Slowly but very surely the old sentimental link between child and parent began to break. Apart from the gadgets which intervened, life was becoming a senseless rush in which sentiment was one of the first casualties. When innumerable clocks sang out, 'Five o'clock, five o'clock. Time's a-wasting, five o'clock', the bewildered child-adult of the New World suffered pangs of anxiety at the thought of life slipping away. He might wistfully think of an old-fashioned evening with the kiddies, but the kiddies thought otherwise. A child reared in a sentitised nursery began to regard the adults in the house as obstacles to a complete life. The parent was becoming superfluous. The child, at first irritated and irritated, began to hate. It grew up feeling unwanted by the overgrown children around it. This corruption of a natural relationship only intensified the adult lust for gadgets and machines. The children didn't want human love, which had become awkward and unsure of itself. The machine was so much more satisfyin~ In their turn the adults obtained more emotional satisfaction from the unquestioning fidelity of a machine. They plunged into space and lavished what fund of affection they retained on their ships, cruisers, copters, couriers and rockets. It is not surprising to read that during one of the space-colonial conflicts of the period the Martians once attempted to raise a Fifth Column among Earth children.

In time the break became complete. The children were put out into compounds (nostalgically and ingenuously called 'playgrounds') at an early age, where they beat and kicked and pummelled each other until any decency or tenderness was

communal bloodstream, and the poison worked its way into the glands, irritating the interstutials, clogging the thyroid, intensifying the suprarenals and overwhelming the pineals.

knocked out of them. 'A bunch of cutters and hangers and kickers', Bradbury called them, 'a drove of bleeding, moronic thumb-screwdrivers, with the sewage of neglect running in their veins.'

What set the sewage running? There should have been more time for children, not less, in the gadget age. But almost every gadget seemed to demand some nonsensical participant. The more leisure people had, the more they wallowed in entertainment or 'instruction'—for many did not dare to enjoy themselves unless the enjoyment was utilitarian and its source 'documentary', to use another thaumaturgic term. Even in the Pleasure Epoch one had to defer to the Puritan. Life became almost impossible for the more sensitive person, who was exposed to a constant barrage of strident commercials, television, ferlies, sollies, advertising, a never-ending persuasion to buy. Here and there in the literature of the period (e.g., Henry Kuttner's *Ahead of Time*) we get hints of economic difficulties. We are told, for instance, that as money became scarce so advertising became more vehement in tone. But why should money be scarce in an era of plenty? Every now and again society must have come to a sudden halt in the face of an ominous danger-signal: NOT ENOUGH MEN WORKING. The human race cannot eat commercials, even if sponsored by Wectabix. No one can clothe himself in an advertisement, even of Warmansnug. But whatever the economic position, the advertisers and their hired entertainers thundered on until a bemused people bought, first of all, ear plugs, and then a specially designed insulating device called a Safety. This was a typical human process: create a public nuisance or menace, and then supply its antidote. Mental sickness and neurotic maladjustment abounded and it was to protect these unfortunates that Paradise Homes were first created. These were Heavens on Earth where, in a sealed room, you could experience any pleasure and satisfy any desire you cared to name—but synthetically. The most favoured recreation in these homes was the sharing of a bed with Niobe Gai, The Most Beautiful Woman in the World, or with Freddie Lester, The Most Desired Man in the World. But neither Miss Gai nor Mr Lester ever entered

one of these homes. They loved by proxy, in the shape of simulacra powered and sensitised in three dimensions and with extreme fidelity to the originals.

The love of pleasure even showed itself in their attitude to death. Death was no longer feared, now the religious notion of punishment following it had lapsed. Death was not feared but the manner of dying was. Life was no longer sacred, and it was once again to be found in abundance. The poor, who could not afford the expensive retreat of a Paradise Home, often chose euthanasia with cheerful resignation. But there was a very strong horror of any unnecessarily painful death. Pain itself was the enemy. David Raven, the most complex multi-mutant known in history, once said: 'That is the real crime: to prolong deliberately the act of dying.'

Poverty did still exist, though every effort was made to hide it. Its existence entailed a certain degree of shame as everyone knew that there was no longer any material necessity for it, as there had been up till the middle of the Twentieth Century. During the period when giant agencies controlled the life of the North American continent, the wealth and glitter of the privileged concealed an underworld of squalor and depravity. The power of the agencies can be gauged from the fact that the proletariat were no longer referred to as 'citizens' or 'workers' but as 'consumers'.* They worked on contract but were kept permanently in debt by enforced contributions for 'welfare', pensions, union dues, etc. No one could leave his work if he was in debt, which he was most of the time. Discipline was kept much more easily than in the old days by the use of drugs, the hypnoteleset (which induced a trance) and the ubiquitous Recreation Room with free hormone tablets.

It is not surprising, then, that even in those days of undiluted pleasure-seeking there were many who experienced more of pain and even formed resistance movements in the old manner. The World Conservationist Association, known contemptuously as 'Consies', opposed the reckless destruction of world resources which was still going on, perhaps four centuries after the first

* Owing to the high level of productive efficiency the proletariat were now only a small minority.

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warnings had been made, and the synthetic character of the new civilisation. The Consies, spiritually a blend of the old-fashioned liberal and the new pineal-dominated cerebrotonic, were driven underground. If caught they were liable to be 'brainburned'. The exigencies of the age had brought forth a type of man who actually enjoyed being 'beaten up'. Their hero was one Albert Fish who, in about 1920, had tortured himself because he liked it. Now there were many Albert Fishes, and they were employed by both sides in the social struggle. In their case pain was itself a pleasure. They could be hired to assault leaders or agents of the other faction, knowing that if caught they would be tortured and anticipating it with hideous relish. This new type of man that the centuries had evolved reduced any kind of struggle to meaninglessness.

The Conservationists had a strong case, viz., that man was recklessly plundering his planet. The opposition, enjoying legal power, were convinced that science was always one step ahead of the failure of natural resources. When meat became scarce, they pointed out, scientists produced the soyaburger; when oil ran low they developed the pedicab. For an account of this struggle, see *The Space Merchants* by Frederick Pohl and C. M. Kornbluth, who imply that the Conservationist warning was finally heeded.

It was a repressive society in many ways. Alpha's creed of happy children was only partially adopted, although it received immense publicity. The great social weakness lay in fear. The rulers were never absolutely convinced that the 'children' were as happy as the TV circuits (giving 'evidence' to prove) claimed. The basic tenet of justice, for instance, did not consort well with the idea of communal hedonism: 'Better that one thousand innocents suffer unjustly than one guilty person be permitted to escape'. By the time we reach the Null-A period this kind of approach has been entirely reversed. The age of agency control was really much closer to the period of World Wars than to Null-A. A Twentieth Century man would have found himself in a recognisable environment during the rule of the agencies, but he would have been absolutely bewildered by Null-A. He would have found that the agencies

had turned many of his own beliefs and slogans upside down and inside out, as with the judicial tenet quoted above, but there would have been a definite point of contact. But the Null-A thinkers considered that men's minds had been disordered by centuries of unfounded positive judgments, of which they were so proud. In reaction they declared that 'the negative judgment is the peak of mentality'.

Under the agencies political and social life fell to a level of morality that I have not encountered in any other period of history. The legislative assembly of the West, for instance, although it still bore the proud name of Congress in memory of the American democrats, openly represented the business corporations. The President himself was a mere ceremonial ponnentity. The idea of representing the people as a society of autonomous individuals had completely lapsed. It would have been impossible for commercial or administrative morality to have sunk lower. When an advertising agency held its weekly conference (and such a body possessed quite as much political power as one of the old political parties) it had to check the room for spy-mikes planted with the greatest ingenuity by rivals. State Departments and the House of Representatives had the right to install their own systems, in lieu of observers, but they were 'fed a canned playback'. I mention this for the sake of completeness but I have no idea what it means.

By the end of the Era of comfort, satisfaction, mechanical replacement of the human mind and the absence of purpose had produced a stagnation never before known. Anthony Boucher describes in *Barrier* the impasse reached by the Logicalists of the Thirtieth Century.

Combination of atomic power and De Bainville's revolutionary formulation of the principles of labour and finance had seemed to solve all economic problems. The astonishing development of synthetics had destroyed the urgent need for new materials and colonies and abolished the distinction between haves and have-nots among nations. Schwarzwald's *Compendium* had achieved the dream of systematisation of human knowledge.

Dyce-Farnsworth proclaimed the Stasis of Cosmos. A member of the Anglo-Physical Church, product of the long contemplation

* This was much later than the period of agency control, of course.

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by English physicists of the metaphysical aspects of science, he came as the prophet needed to pander to the self-satisfaction of the age.

The love of Cosmos was not man nor his works, but Stasis. Man was tolerated by Cosmos that he might achieve Stasis. All the millennia of human struggle had been aimed at this supreme moment when all was achieved, all was known and all was perfect. Therefore this supernal Stasis must at all costs be maintained. Since Now was perfect, any alternative must be imperfect and taboo.

By this period the secret of time travel had been discovered—I shall refer to it briefly later in this chapter. To maintain the perfect state of Stasis and to insulate it from any corrupting alien influences, the State attempted to prohibit time travel by erecting a Barrier. Doctrine was expounded in a newly formed Church of Cosmos. The only works permitted in libraries were those upholding Stasis, all found in a uniform format ordained as ideal and static by the Cosmic Bibliological Committee. Imaginative research was forbidden (as, indeed, it had been once before) and scientists plodded endlessly in the study of what had already been established. We read of 'arid stretches of intolerable music composed according to the strict Farinelli system which forbade, among other things, any alteration of key or time for the duration of a composition'. For entertainment you might go to a 'solly, which turned out to be a deceptively solid three-dimensional motion picture, projected into an apparently screenless area. . . . But only the images 'were roundly three-dimensional. The story was a strictly one-dimensional exposition of the glories of Stasis'. The sacred symbol of Cosmos was the double loop of infinity. The cross, crescent and star were no more to be seen.

Many citizens (or consumers) found such a society unbearably tame. The excitement had been drained away, all possibility of adventure removed, and there was no scope left for individual initiative. Robert Heinlein, in *Coventry*, tells us of a young man who was charged with punching another man on the nose. He was offered a choice between going to Coventry, a special compound reserved for anti-socials, or undergoing psychological adjustment. Being a man of excitable and choleric tempera-

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ment, he gladly chose the former, preferring a certain amount of physical hardship and relatively primitive conditions to what he considered mental castration. In his final statement after sentence he shouted at the judge: 'You've planned your whole world so carefully that you've planned the fun and zest right out of it. Nobody is ever hungry, nobody ever gets hurt. Your ships can't crack up and your crops can't fail. You even have the weather tamed so it rains politely—after midnight. Why you wait till midnight I don't know—you all go to bed at nine o'clock!'

According to Kornbluth society was fast reaching the point where the majority were morons. The reading of books, which played such an important part in the rise of Western and Chinese civilisations, had practically ceased. Society was controlled by a few intellectuals and technicians but there were signs that they were beginning to find the job too big for them. Population was once again becoming a problem, despite the high level of productivity, because ordinary people were more demanding than they had ever been before. There was no luxury that they did not see on their three-dimensional television, and they believed they should have a share by right. They demanded speed, comfort, noise, these three above all. Noise they always associated with power. A worried Government was at one time reduced to supplying the semblance of these things, to cheat people whom they could not persuade. For instance, speedometers were never correct and engines were made much noisier than they need have been, by the installation of special air-whooshing circuits. All public entertainment was on a sublimely moronic level. Programmes were practically reduced to a series of gag lines, at which people howled with laughter. Sample: 'Would you buy that for a quarter?' During its phase of popularity this line would be heard fifty times a day, with response certain.

Kornbluth also gives an extract from a radio commentator's script, which illustrates far better than any words of mine the level at which public life was conducted.

Latest from Washington. It's about Senator Hull-Mendoza. He is still attacking the Bureau of Fisheries. The North California

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Syndicalist says he got affidavits that John Kingsley-Schultz is a bluenose from way back. He didn't publish the affidavits, but he says they say that Kingsley-Schultz was saw at bluenose meetings in Oregon State College and later at Florida University. Kingsley-Schultz says he gotta confess he did major in fly-casting at Oregon and got his Ph.D. in gamefish at Florida. And here is a quote from Kingsley-Schultz: 'Hull-Mendoza don't know what he's talking about. He should drop dead'.

Even the historians themselves were subject to this pervasive low quality. Writers like Bradbury, who lived in the early part of the Space Era, had a reverence for quality and a style of their own. But the quality becomes thinner, through Kuttner and Heinlein, the best of the later historians, to Van Vogt, who was perhaps a metaphysical genius, but lacked almost completely any literary graces or even the power of expression. There are certain words and actions that give a period away. The archetypal word of the Space Era was the verb 'to grin'. In a normally constituted society adults do not grin; it is a grimace that is peculiarly fitted to express the child-mind. But because these adults were, in effect, children in large bodies, they grinned continually. The word, hardly ever encountered in earlier adult literature, jumps at you from nearly every page. Everyone grins at everybody else. Presidents grinned at Prime Ministers, space pilots at mathematicians, biologists at space nurses. Even when they spoke the words were accompanied by a grin. Among children a grin signifies uninhibited amusement; among adults it signifies morbid unawareness. It symbolises the spiritual decadence of the times.

Towards the end of the Twenty-Fourth Century there was a mass retreat from civilisation, not unexpected. It is described by A. E. Van Vogt in *The Universe Maker*. The soporific comfort, the noise and speed, the strident advertising, the bad art, the idiotic entertainment, the bustle, the nervous tension—all united together to persuade men that this civilisation they had created was a monster and would soon overwhelm them completely. Some rushed back to a life of simplicity (but a bogus simplicity, which explains why it failed), others put all their energies into the conquest of matter, by which they felt they had been enslaved, via their sense organs. There was a pro-

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nounced will to escape, and this movement probably served as a valuable experiment from which the later founders of New Crete must have gained some useful information.

Somewhere there must have been an intolerable rigidity [wrote Van Vogt], a basic falseness. . . . Authority had once more attained too great a position. In response, people had flung themselves away from a civilisation that, more and more, told them that they knew nothing, that they must conform to patterns laid down for them by those who knew, or rather by those who had the legal right to know.

Instinctively, they had tried to return to a state of being Cause instead of Effect. They had rejected the hierarchy of intellect which, ever frigid, never dynamic, sought always to impose restrictions. Men had fought up from a thousand dark ages, each time to meet the same blind control forces, each time to surrender for a while to a growing mess of chains; and then—taking alarm—struggling as blindly to escape.

The escape was bogus because the new simplicity was based on one very complicated mechanism. The approximately 15,000,000 who attempted to leave civilisation behind did so in airships which they tethered to Earth but moved from place to place. They were called Planiacs, popularly Floaters (not to be confused with levitators). Most of them congregated in a vast area of the Rocky Mountains in North America, their limits spreading East from South Montana to Lake Michigan and South to North Texas. Those who still lived in cities were called Tweeners. The other side of this experimental retreat, meaning those who tried to conquer the physical world, were called Shadows. They were few in number but very powerful. As a result of this exodus many cities lay neglected and farms had turned into wildernesses. The Floaters had adopted an open-air life and took a particular delight in fishing. They rejected time and no longer carried watches. But their ultimate position was weak because the new life was dependent on a technology, the knowledge required to maintain and, at a later date, to build airships. Only the Shadows had retained any technological capacity. The Planiacs had their own leaders, who administered a limited discipline. Disobedience led to the withdrawal of food, maintenance and (important

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in this new semi-superstitious society) preachers. It was quite obvious that the enlightened Shadows could have enslaved the Floaters and Tweeners whenever they wished. The ministers of the new religion (whose nature is unknown to me) were thoroughly corrupt. They would bargain and demand bribes, for instance, before they would perform the marriage service. A decaying technology was uniting with a reviving superstition to form a social hybrid.

The first Floaters were quite an early phenomenon. So many people were taking to the air and living at a simple nutritional and recreational level on fish and investments that economists began to predict disaster. (They are admittedly prone to do this at any time.) The production problem was always a big one, despite the enormous potentials. An attempt was made by Congress to restrict sky-riding to vacations, but it was too late. The habit had become too ingrained and had to run its course. For a period the population was divided not only physically, but also morally, between Floaters and Grounders. The latter tended to be strait-laced people who regarded the former as criminally self-indulgent. Sensational as it sounds, the distinction was not really more significant than the earlier one between Hedonists and Puritans, but the variety of modern civilisation gave these cleavages new and striking expressions. The discomposure felt by the more solid citizens was reinforced by the new discovery of the psychologists that people could be affected by events in the remote past of the continuous protoplasm which had descended from mother to daughter since the first cell divided. It was also discovered at a later date that the tensions of males could affect the psychic structure of the unborn child. Illogically neglecting their personal experience, many people began to fear that a newly acquired habit would never be lost—as though such a principle depended on the discovery before it could become effective! On the other hand, the Inter-Time Society for Psychological Adjustment was now using therapeutic methods by rooting out guilty ancestors and arraigning them before their suffering descendants. (Time could be manipulated easily by now, though the ensuing complications were so vast the practice never became popular.)

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But it was at first believed that if the anthropological situation proved hopelessly difficult, it would be possible to return to an earlier time and to start again before the irrevocable blunders had been made.

The Tweeners still occupied a quarter of the continent, grumbling perpetually about their errant fellow-men. Shadow City lay in the Rockies, an almost impregnable fortress protected by an energy screen. It could only be approached by air. The Tweeners, aided by influences from the future, wanted nothing so much as the destruction of the Shadows (who gave them an inferiority complex)* and the compulsive return of the Floaters to productive work.* Only the reticence of certain influential figures in business and military circles prevented the imminent outbreak of war, with the almost certain destruction of the Tweeners. The old gay march to annihilation, so marked in the Twentieth Century, no longer existed. Even death ceased to be attractive, or to promise solution. Van Vogt saw in it a weakening of the life-force.

The life-phase of the struggle was almost lost. Everyone connected with the gigantic conflict would go down in the disaster. Much had been expected from life-force, but it was turning out to be suppressive, unthinking—not creative. So low had the spirit sunk that even death did not bring awareness of identity. For long now, this same spirit had been caught in stereotyped life-traps; it no longer even suspected defeat. As things stood, any new major disaster could bring about final destruction. . . .

The key to the situation undoubtedly lay in the Shadows, who had been able to transcend their physical limitations. More than any other Western sect they approximated to Eastern yogi, and yet they remained peculiarly Western in their anchorage to physical knowledge. They claimed that they were trying to undo the effects of the psychological disasters that had demoralised the human race from the beginning of the Twentieth Century. The psychologists searched for a cause of the mass flight from civilisation, and found it in the combination of two factors: inherited weakness and a justified retreat from intolerable pressures. The solution, they felt, lay in nullifying the experiences and disasters that had affected the

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proto-plasmic lines. (Long before this Jung has suspected the existence of an 'ancestral shadow'.)

A Shadow had to be trained. Few, Planiacs could pass the tests, owing to the low level of their cultural background, but they could be induced to return to the life of a Tweener. The final transition was partly technical. A millionpower brain-pattern tube was focused on the somæsthenic centres of the



parietal lobe on the left hemisphere of the brain (for a right-handed person), and established a high conditionality of flow patterned exactly after that of the steptube itself. This created a nerve tube in the brain. The new control slightly altered the atomic pattern of the body. This created the Shadow shape—it had been known for centuries that matter did not exist autonomously but it had never been accepted in daily life. The vision of the Shadow became remarkably acute—into distance and ‘through’ material substances. The Shadow shape itself was induced by the introduction of extra energy into the body flow, in which a cyclic change in sanity and insanity, positive and negative patterns, alternated. The Shadow shape was only assumed when danger threatened, however—or for time travel. (Many of the ‘ghosts’ of antiquity were actually Shadows engaged in reconnaissance.) The discoverer of the principle was named Grannis, and all subsequent leaders were called Grannis also. Shadows regularly went through the experience of death and resurrection. By this means, a kind of ritual ecstasy, the associative terror of death disappeared and certain other tensions were broken. The Shadow theory of history was that guilt must always be expiated. It inheres in the protoplasm.

There was another even more sensational retreat from the burden of civilisation. It preceded the Planiac movement and was cruder in its expression because the continuous enervation of comfort had not yet had time to refine away the brute that still stood at the core of mankind. This phenomenon was an outbreak of head-hunting which appears to have been confined to New York, where the clash of animalism and civilisation was greatest and where the manure for neurosis was always richest. It was not the first time that an advanced civilisation had been disgraced by this sort of thing—remember the gladiators of Imperial Rome and the Mohawks of Eighteenth Century England. A successful head-hunter held a position in society similar to that of a champion boxer or film star in the Twentieth Century. He lived in a palatial mansion, possessed many wives, and displayed in showcases the heads he had taken. If he committed suicide at the height of his fame he could be sure that a plastic monument would be erected to his memory.

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His life was hard and ascetic, food was taken only for its nutritional value, never for pleasure, he got his offspring by artificial insemination. Only boys were kept and they were trained to succeed him at the age of six; after that they knew no mother love (if, indeed, they ever knew it). Girls were given away. This hunting was eventually legalised in Central Park but nowhere else. A hunter who killed a rival took all his trophies. It was another example of an attitude going full circle: a pleasure-seeking population threw up this horrible practice, and revelled in the spectacle of uninhibited brutality.

The other escape from the Pleasure-Pain dualism was, of course, into time. Before movement in the fourth dimension was achieved the apporteur had been discovered, an apparatus for creating a temporal discontinuum and photographing scenes of the past within a limited range of time and space. By 2155, however, the technique of travel had not only been mastered* but had even been put upon a commercial basis. One metal foil advertisement of this period read:

ROME AND THE BORGAS!

THE WRIGHT BROTHERS AT KITTY HAWK

Travel in Time Inc. can costume you, put you in a crowd during the assassination of Lincoln or Cæsar! We guarantee to teach you any language you need to move freely in any civilisation, in any year, without friction: Latin, Greek, ancient American colloquial. Take your vacation in Time as well as Place!

As might be imagined, the Government looked on this new movement askance. Supposing large numbers of citizens or consumers went off on a journey—and never came back! The Government took the precaution of insisting on a special licence before any firm could participate in the new business. Applications were examined carefully. A Government which claimed it was creating a perfect society for the future seemed to be ridiculously nervous about the effect of visits to the past. On the whole, only trustworthy servants of the State were given permission to travel, yet their trustworthiness was often misgauged,

* The method adopted was the blasting and undermining of time, and the formation of a stasis oval. This could be made invisible to other points in time by spraying it with a magneto-optical film with the same refractive index as the air around it (Frank Belknap Long).

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for many of them tried to make their vacation permanent. This called into being a new organisation, the Searchers, a temporal police who had orders to find their man, wherever he was hiding in the centuries, and bring him back. It is revealing that hardly any travellers chose to venture into the future.*

A later society tried to prevent time travel altogether by setting up a Barrier, as I have already shown. The old dictatorships had always attempted to insulate their people spatially. The attempt now had to be made temporally. The Barrier failed—in fact, when it broke down an army of travellers who had been suspended, some of them for many years, now crashed through like hail and made an instantaneous appearance. The problem for the security forces was a double one: keeping temporal aliens out, and preventing their own people from acquiring subversive views on their travels or from staying out for good. Bradbury, in *The Illustrated Man*, tells us of one method adopted: Travel in Time Inc. were required to place a psychological bloc in the brain before travellers left. Once treated in this way you were unable to tell anyone you met your true time or birthplace, nor could you reveal the future to anyone in the past. The past and future had to be protected from each other, just as fathers and sons sometimes have to be kept apart.

The achievement of space travel delighted the official mind. That of time travel was regarded as a dangerous nuisance, and its use was never encouraged. A constant fear of rulers was that someone from the future would negate all their plans, or that someone from the past would refuse to permit in his own sector of the time stream what had already been done in another (the sectors interlocked, or even co-existed in identical space—partial disruption might easily destroy the desired end-product). If we examine the problem through the suspicious eyes of security officials we will get the impression that the time-ways were cluttered with secret agents, revolutionaries, fugitives and political criminals. It is necessary to retain a sense of

* We know from a chance reference that while men wore uniform and breeches in 2155 they wore slack pants in 1938. It is certain that those who hated formality would have been attracted by this piece of information.

proportion—it is equally easy to fill the space-ways with pirates, atom incendiaries, smugglers and patrolmen. We are told by Vargo Statten in *Man From Tomorrow* that one Thomas Smith returned from the year 2256 to a 'date unnamed merely to recover scientific records which had been destroyed. He also set out to help the progress of society to a better future—it had been recorded that a man named Thomas Smith had in fact done that. Poor Thomas! He brought an instantaneous cure for tuberculosis from the future, also the formula for the production of an artificial eye with effective vision, both of which he projected into the minds of scientists. But on the long-term degeneration of his race he seems to have had no influence. We hear him complaining sadly about the practice of sun-bathing, which apparently fell out of favour in later years, then he returned to his own time with the information he had come for. We don't even know if he got back safely. He might even have been temporarily halted by the Barrier and finally crashed with a thousand others into the lap of the Stasis of Cosmos.

The Mind in Chains

THIS CHAPTER WILL be largely concerned with the types of government that took control in the Space Era, political ideals and motivations, what occurred in the old quest for freedom. Neither men nor myself were any longer interested in the old sectional and national histories, the rival claims for this or that pigment or cranial structure or geographical background. Most people had the same light-brown skins and the same shape of head. When variations occurred they were usually mutations bearing no relationship to race or climate. It was enough to be a man. After all, you might have been a Martian, Venusian or Zeton. Was Enro the Red a human being? For all I know he may have been a crab. He was certainly the most powerful ruler in human history, but we cannot therefore deduce that he was human. Russell writes somewhere of Denebs, who imagined they were lords of the Universe, and yearly approached nearer our system. The Ursans also made contact, and made men feel rather puny. No, it was best for men to regard themselves simply as men, no longer as Irishmen or Japanese or Scandinavians.

Up to the Twenty-First Century history had always been regarded as a process of continuous development. Historians like Fisher regarded it as the pursuit of freedom. Every historian had his own theory, or at least shared a theory with someone else, as a kind of distinctive label. The proletarians were coming to power or rival cultures were working out a common existence. But this was only a phase. By the time of the Space Era history had, in a sense, ceased. All the old problems now seemed pointless. Men had been worrying themselves about ghosts, or

had at least inflated little uncertainties into huge balloons of doubt, blown them up with blasts of cosmic significance—just like adolescents do. In their maturity they could no longer sit up all night discussing God, freedom, equality. They preferred to get on with what they understood. Gerald Heard wrote of Four Revolutions. The first, the Religious, occupied men for uncounted centuries. Then, without answering any of the questions they had set themselves, they suddenly put God on one side and set to work on the Political Revolution. It became absolutely essential to discover freedom and establish democracy. Accelerating speed, they passed to the Economic Revolution, the establishment of equality and material comfort. Finally, they decided they must understand their own nature, for everything else depended on that. This was the Psychological Revolution. Man's energies were turned to the study and satisfaction of his own psyche; everything else would follow. God would be known, each man would win his own particular freedom, the urge to absolute equality would no longer embarrass the individual.

In the third chapter I wrote of how Freedom fought Tyranny. That's how they talked in those days. It was another conflict that was never settled. Or, put in another way, the tyrants continued to tyrannise and each man found his own freedom, the only freedom that could possibly have any meaning for himself. It was the idea of freedom that changed, just as the idea of equality changed. Absolute freedom, absolute equality, the concepts of the political theorists, were thrown overboard. It was impossible for a single State fiat to give every man freedom, for no two men wanted or needed the same things. The new concept of freedom gave one man a woman and another man a burden. Either could kill, either could delight.

The political thinking that established such a system was called Alphism, and I shall refer to it more fully later. It dominated the Space Era, just as Machiavellianism dominated the Renaissance and Rousseauism the Nineteenth Century. The influence of Alphism varied from one period to another within the Space Era. I am not claiming that Alphism settled anything or even that it was worthy of any respect. Perhaps it surrendered

too many ideals to be altogether satisfactory. In the end comfort did not prove to be the totem round which the human race could gather for worship indefinitely. There was a suspicion that men had surrendered themselves, body and soul, to their rulers and in exchange had received robot servants, sensitised nurseries and ships that could outspeed light. At first it appeared a possibly worthwhile bargain but the prizes lost their glitter and turned into personal frustrations, rebellious children, space neuroses. Life ceased to develop and become a maelstrom, in which every conceivable thing and idea and attribute and quality were tossed about meaninglessly and very soon there seemed to be no point at all in comparing one thing or concept with another—unless they were velocities. Wars continued, but they were wars of worlds, galactic struggles, which never seemed to offer to many any new hope or new direction. At one time the military struggle between Christendom and Islam seemed to sum up an important conflict between philosophies, modes of life. No one could feel very strongly that it mattered much whether Earth defeated Venus or Venus defeated Earth. Men no longer retained a purpose. They were beginning to approximate their own robots. The only possible prize a man could work and fight for was Power. Power had always attracted but the quest for it had always been restrained by moral sanction. In the days of agency control they had a dogma which ran: 'Power ennobles. Absolute power ennobles absolutely'. This was not said humorously. It wasn't even said cynically. They had come to believe it.

The situation was reflected in the pattern of inter-planetary politics. Possibly from some not-understood compulsion, all the old errors that had caused so much upheaval on Earth, the unnecessary colonialism, the unrewarding imperialism, the naïve nationalism—they all made their reappearances but this time in space. For a time there was the ridiculous spectacle of one small part of Earth's area laying claim to a whole planet, with rival parts doing likewise. I can only compare it to Mark Antony's left leg, Cæsar's big toe and Pompey's nose all claiming the body of Cleopatra at one and the same time. Even when

political fragmentation on Earth became a thing of the past, Earth could still snarl at other worlds over title deeds and legal possession. The 'civilised' Ursans suggested a peaceful agreement whereby each world should annex politically and exploit technologically only those planets which offered a genuine base for development, e.g., Jupiter with its radium deposits was of far more value to the Ursan than to the Earthman, while in exchange the Ursans could offer the Earthmen oxygen planets in their own system in which they themselves were not interested. But the habit of settlement by force was so strong among Earthmen they could not accept this suggestion rationally, with the consequence that they were finally compelled to after several disastrous defeats in space war. Isaac Asimov refers to a dispute over mining concessions on a third planet between Earth and Kloro, a chlorine planet. Anyone who was not bedazzled by the ecstasies of power could see at once that chlorine and oxygen planets belonged by natural law to entirely different biologies. Indeed, any permanent hostility between two such planets was itself out of the question. Yet the leaders of Earth insisted on their 'rights' and made tremendous speeches in which they invoked 'planetary honour'.

Rather surprisingly, even after Earth had recovered from the effects of the Fourth World War, the World State was not set up immediately. At the latter end of the Space Era the seat of power lay in a World Council, but for several centuries before this the Twentieth Century system of Superstates or Power Blocs was revived. Apart from occasional unions of varying strength, there were normally three of these, roughly the same three as before the war but with different names. Oceania had become the Atlantic Federation, Eurasia the Panasiatic Union, and Eastasia the Pacific Confederacy. Certain marginal territories tended to change hands occasionally, but the general outlines remained the same. On the whole these States remained at peace with each other, even if a rather suspicious peace, the main exception being the period of Sino-American conflict in the Twenty-Fourth Century. No advantage is to be gained by comparing these States structurally, as they tended to resemble

each other very closely. Far more instructive is a comparison of systems separated by time. I take most of my examples from the Atlantic Federation, as their records were written in the one language I can understand. I doubt, however, if a study of the Panasiatic or Pacific archives would reveal many variations.

VARIETIES OF POLITICAL STRUCTURE AND BEHAVIOUR DURING THE SPACE ERA, THEIR CULTURAL IMPLICATIONS AND OTHER RELEVANT OBSERVATIONS.

A. *The Period of the Sleeper** (Transitional: conventional revolt of deluded masses against unintelligent oligarchy.)

One's first impression is that the Sleeper, Graham, is merely an imaginative device. But apparently he really existed. The possibility of inducing suspended animation was known—although Graham's state was accidental. When he awoke in London he found himself heir to an enormous fortune, due to compound interest,† and he was also an important figure in the new society's hagiography. Graham found the world 'unscrupulous, pleasure-seeking, energetic, subtle, a world too of dire economic struggles'. It was marked by the systematised sensuality of the rich, as apparent in the kinetoscope versions of novels and operas.

Graham had been left two large fortunes which were put in the hands of Twelve Trustees. They formed the Council which

* The date is uncertain. Probably the beginning of the Twenty-Third Century. Wells, as usual, leaves the matter in doubt and even tries to mislead. When considering Wells's work we must always discount his fascination with technological achievement, even such humble devices as moving roads and monorails. Wells was so much a man of his age it is not easy to understand why he roused the anger of the authorities so consistently. Possibly he criticised the rate of development. It is interesting to note that while Wells cannot mention an atomically driven gadget without a display of wonder, Huxley takes all such things for granted and even seems slightly amused by them. I deduce from this that Wells lived in the early part of the new age, Huxley in the later. This is reinforced by the fact that Huxley writes about a much later period than any to which Wells gives his attention. Wells is rather like a barbarian dazzled by new inventions; Huxley is a cynic, living at the end of a culture, a latter-day Roman.

† This in itself places the period between the rejection of common ownership and the heyday of agency control, when private property was, if possible, even more sacred than in the Nineteenth Century.

gradually assumed ownership and control of all property.* Ostrog, who had failed to gain election to the Council, led a popular revolt against it—there was a widespread notion that he woke the Sleeper by an injection. The revolt was successful and the power of the Council was destroyed. Graham was technically master of the West. The cities of Western America had revolted two days before and there was still fighting in Paris, which had recovered some of its previous importance.

Children only went to school for a short period and they learned very little. They went to work so early it wasn't considered worth while educating them. Hypnotism was used in every walk of life, e.g., children of the labouring classes were hypnotised at an early age to make them punctual and trustworthy machine-workers. More than a third of the population were virtually slaves of the Labour Department. They were dressed in blue canvas and could never earn enough money to buy their freedom. The rich, meanwhile, retired to Pleasure Cities, where they could resort to euthanasia if they were tired of life. Ostrog's revolt was merely a transfer of political power from one junta to another. He himself was alarmed by the power exercised over men's minds by the old libertarian slogans which he had merely revived for strategic purposes. He admitted there was already discontent under his new régime. There had been trouble in Berlin and Paris, and it had been necessary to send a Senegalese division of the African Agricultural Police (Consolidated African Companies) to deal with it. In London itself there was a general strike and talk about setting up a Commune. Babble Machines (official propaganda media) were making counter-suggestions in favour of law and order. The mob were inclined to be violent but they were leaderless. Wells called them silly, yelping fools, like sheep, who would always be ruled by someone. Meanwhile the Pleasure Cities had been designed for the easy extermination of the brainless rich, who die childless out of enervation.

Graham decided to make his theoretical leadership actual. He saw for himself the wretched condition of the workers and

* A delightful paradox! *Private* property still, but so private as to be virtually public.

heard that Ostrog had called in the Negro Police to quell them. This was not actually the ruthless and contemptuous act that Wells imagined, for by this time the population of Britain was perhaps more Negro in blood than White.* Graham was acclaimed by the workers and a second revolution took place, but Ostrog escaped. In the fighting Graham's followers were at first successful but they had very little hope of overcoming the police reserves who were due to arrive from the continent by jetplane. Graham had learnt to fly (none of the workers were taught) and lost his life attempting to harass the invader. Ostrog was also killed. The whole business is pathetic. We know that, whoever wins, the resultant political system will always be identical with the one that precedes it. This revolution was in fact an anachronism. It was certainly the last occasion on which unarmed workers rushed at well-armed, disciplined police and soldiers, shouting 'Liberty, Equality, Fraternity' and slogans of that kind. Ostrog was a criminal, Graham was a fool. The world of the future was to be ruled by criminals, so Graham was out of succession—but in any case, the rule of a fool is always more disastrous than that of a crook. The fool always attempts the impossible and involves everyone in his own ruin; the crook thinks first of himself but realises that it's worth while expending a few crumbs to keep his critics silent. Graham should have gone on sleeping. Perhaps his dreams were sweet.

* B. *The American-Chinese Clarity*. (Transition from Super-state to World State; final outburst of racial rivalry.)

While there were three super-states the Western, Atlantic or Oceanic was usually the most highly advanced technically. North America was the centre of gravity of this combine. According to Olaf Stapledon, the Americans were 'universally feared and envied, universally respected for their enterprise, yet for their complacency very widely despised . . . they were rapidly changing the whole character of man's existence' (*Last and First Men*). American capital and products had spread all over the globe. The American press, gramophone, radio,

* Remember that Britain had been colonised by Negroes after the Fourth World War.

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cinema and television had drenched the planet with American thought, but unfortunately the worst and most vulgar part of it. Europe was passing through a period of decadence and exhaustion. Asia had emerged, under Chinese leadership, as the only possible challenge to American domination of the planet. China, absorbed in practical social problems, and India, concerned with the reality behind appearances, drew together.

America and China both regarded physical energy as a good in itself, but there the resemblance ended. The Americans had reconciled Behaviorism and Fundamentalism, dismissing true spiritual qualities in favour of a materialism that derived from spiritistic reality in all quanta. For them physical energy was an end while to the Chinese it was merely a means to a superior end, perfect rest and serenity. The American ideal was a helicopter for every worker; men were judged by their wealth, which they accumulated as a token. The Chinese ideal was a nationally shared culture; material conditions were well below the American, but this was not considered important. Even at this stage, says Stapledon, men were beginning to lose the lust for truth and the intellectual curiosity that had created civilisation.* Also absent from these two protagonists was the exercise of wit, the ability to laugh at oneself, which the Europeans had had in abundance. In its place they put a heavy self-importance. Each was burdened with a sense of mission, the salvation of humanity. From this point onwards (until the establishment of New Crete) all is deterioration. Technical advances were still made but they became fewer and fewer, more and more pointless.

The Sino-American War, which was fought during the Twenty-Fourth Century, was inevitable and at the same time, even while it was being fought, obviously the last of Earth's civil wars. The Americans devised a new malignant germ which disintegrated the highest levels of the nervous system and rendered all who were affected incapable of intelligent action. It could, if the infection were virulent enough, lead to paralysis and death. It played havoc in China. It was not the American

* Surely the process started long before this.

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nervous system but her finely articulated economic system that suffered correspondingly. American business and the workers, after the first burst of patriotic nationalism, began to oppose the war. Strong pacifist groups arose on both sides. When the two sides met to discuss terms they did so with the following obsessions:

American. That the Chinese had no souls. They were wilfully blind towards the divine, energy-for-energy's sake factor that was America's glory. The mission of the Americans was to rid the planet of the reptilian Chinese.

Chinese. That the Americans were a typical case of biological retrogression. Like all parasitic organisms, they had thriven by specialising in one low-grade mode of behaviour.

• The Second World Republic emerged from the negotiations, a sickly creature that no one expected to live for long. Perhaps that was why it did manage to live on, for everyone treated it in the manner of an invalid. It was really controlled by a Financial Directorate. (This was the secret of its health, for the finance corporations controlled enterprise; an elected body based on good intentions could have been stifled overnight.) Each industry was theoretically governed by its own members, though a few dominant personalities actually controlled their destinies. Industries were classified as 'noble' or 'ignoble'. The inner ring of noble industries were, in order of prestige, Finance, Space Travel, Air Travel, Engineering, Surface Locomotion, Chemical Industry and Professional Athletics.

America won the peace. The Chinese were Americanised.* To begin with the Chinese were kept busy coping with the plague, which they called 'American madness'. A new sect, the Energists, began to preach the sanctity of action. A physicist pointed out that the supreme expression of energy was the tense balance of forces within the atom, and the Chinese claimed that their quiescence was the expression of mighty forces in perfect balance. Thus the worship of activity was made

* We learn from Arthur Clarke (*History Lesson*) that a Chinese publishing house, H. K. Chu & Sons, City of Peking, printed a score of Sibelius's Seventh Symphony in the year 2371. Sibelius was a Eurasian, but flattery of anything European (the third force) was a common procedure at that time.

to include the worship of inactivity, and both were founded on principles of natural science.

Scientific curiosity was by now dead, and was only to recur in fitful flashes such as that which discovered the principle of instantaneous removal. Technical advances were still being made, but merely by extending the lines of previous research. The old religions still existed: Buddhism, Islam, Hinduism, the Regenerate Christian Brotherhood, the Modern Catholic Church of America, the Orthodox Church. Freaks such as Belialism had died a natural death, others such as Stasis had not yet been born. An effort was being made to amalgamate the doctrines and tenets of the various sects, and some centuries later the only real division lay between the Romanists and Orthodox. (There were local variants, as in French Canada.) God was now accepted by all as the Divine Energy. As Science had such prestige, it was decided (about the year 2400) to merge it with Religion. The International College of Science was called upon to nominate a select body, which should be sanctified by the Church and called the Sacred Order of Scientists.

The population of the World Republic was ruled by a few ideas. Progress: for the individual this meant a continuous advance in space exploration, legalised sexual freedom and the ideal of millionaireship; for the race these things were co-ordinated in an ever more intricately organised social system. Fanatical worship of movement: the three most honoured occupations were flying, dancing and athletics. A vast amount of fuel and energy was spent on ritual flying, the supreme act of worship. Dancing was particularly associated with the old Negro race, though the only 'pure' Negroes now were throw-backs. The Jews alone retained any respect for intelligence, but of a debased kind. They were the only people left who still possessed the mental elements of tribalism. They were capable of criticising means but not major ends.

To my mind *Last and First Men*, from which I get this information, is a propagandist work. It was dictated (or it professes to have been dictated) to Stapledon by a man as yet unborn. I am not competent to judge the accuracy of the later chapters

(which deal with a time not yet experienced, if such a thing is conceivable!); they do not concern me, and I am prepared to accept the veracity of their source, simply because they do not concern me. But I am convinced that Stapledon's account of historic time is almost entirely fictional, although I have read passages for which I could find corroboration in other, more serious, writers. Stapledon showed no intention, so far as I could see, to write history but only to moralise, to castigate our race, for its faults and to humble us before our successors, to whom he doubtlessly belonged through the agency of some mysterious time-warp. His book reads like an account of the Reformation by a bigoted Catholic historian, sourly proving that even the finest achievements of mankind were contemptible compared with what they *might* have been if certain largely unspecified directions had been followed, etcetera and so forth. If the charity so prominent in my other pages is missing in the foregoing, at least you know where to lay the blame.

C. *The Period of Agency Control*. (Transition from Finance Corporation to Multipurpose Agency, probably as 'cover': debasement of political forms and institutions: cultural decadence falls to new low level.)

I have said enough about this period in the previous chapter, and will avoid repetition.

D. *Alphism*. (The Space Era's theory of political control in its purest form: Sheldonian psychology applied to society.)

The best expression of Alphism is to be found in Gerald Heard's *Doppelgangers*. The theory was named after its earliest proponent, Alpha, a late Twentieth Century dictator. Although the theory was first propounded and even given limited effect at such an early stage, it became the basis of the most characteristic form of government known to the Space Era.

In one of his great perorations Alpha said:

We must wait on life. We don't know what it wants but the old liberals were right: we must have freedom so as to be able to wait and let it develop as it will. We will tolerate everything save intolerance. That is where the New Liberalism has learned the lesson taught by the failure of the old. We have no quarrel with anyone save those who want to dragoon the people into causes

and sacrifices which the people don't want and life doesn't want them to want.

But we know that the people, because they are kindly and simple and ought to be off guard if they are to be easy and carelessly creative, can be exploited and seized upon. Their liberty is our concern, and we will watch that they may daydream if they wish. There is the creative role. We are merely their trustees and guardians. We have no quarrel save with those puritans and self-appointed fanatics who want the people to sacrifice themselves for any aim save clear, immediate happiness.

The people were drugged with happiness, even at the risk of occasional economic disproportion. It was Alpha's great discovery that it was just as easy to please people as to antagonise them, and far more rewarding to the ruler. The new sociology taught that the world was divided into two classes as a genetic fact. The mass of the people wanted to live at ease and, on the higher levels, to develop an art of living. Nature had also provided another type, of too high nervous tension ever to be able to relax, whose sole aim was to work—for others if possible.

It was Alpha who initiated the practice of referring to the ordinary citizens as 'the children of the State'. Like any other children, they were given toys and (this showed Alpha's intelligence) preferably toys that were not quite perfect but needed a little tinkering.

Never give them a toy which they have to put all together for themselves but, at the same time, never give them one that is perfectly finished and to which they can add nothing. I think we know our children and have found out the way to keep them perpetually arrested in happiness by sending them round and round the maze of pleasure at such a pace and on such a span that when they arrive back at the same place it seems new—or you may prefer an eating term, the appetite has recovered.

If you examined this theory more closely you discovered that it involved the division of the mind from the body. The body was kept intact but the mind was gently persuaded to put on its own handcuffs—or surgical belts, depending on your point of view. In the past it was the body they used to castrate. Alpha castrated the mind. He said it was more efficient and

more merciful. The new weapon he borrowed from the psychoanalysts was anemectomy, the numbing or sealing off of a particular area or function of the mind. This technique was of inestimable value in making people comfortable merely by neutralising their capacity for curiosity, anger and opposition. It was no longer necessary to threaten them—and anyway, threats had failed. 'Just getting them what they want has made them quiet, while continually threatening them and attacking them kept the revolutionary wheel spinning for ever'.

• The problem had been how to stop the thesis of liberty and the antithesis of order strangling each other and exhausting all mankind. Unless a synthesis were found they would destroy each other.

I saw that all the other Revolutions had themselves been in three parts. First were the actual revolutionaries, thinkers who were completely abstractionists—as we used to call them, rationalists. Then came the man of actuality and action, instead of theory. The doctrinaires were demoted by the opportunist. He had to be a reactionary because he had to find something precedental and once-accepted to take the place of all the theorising that hadn't worked.

Most revolutions die from the excesses of youth. After a vigorous first movement there must follow something slow and steady. Militarism was out of date because war weapons were now ludicrously imprecise.

• I saw that the next Revolution would be made by secret police, by mining from within, by the discrediting or the capture and conditioning of all key men who made or could make trouble, and by propaganda, mainly amusing, debunking, ridiculous—making jokes and lampoons; and by getting 'noble' characters into 'discreditable' situations. I bought up scores of funny papers and put the men who liked debunking in to edit them with a free hand to attack and make ludicrous patriotism, militarism, all provincialism and all drill. I had comic songs made that guyed the whole bloodthirsty lot, and the songs and the cartoons stuck. It became silly to be patriotic or to care for arms—childish. Then the better people I won by argument and found places for them, so that the tough didn't know what was promised the tender-clever and the tender didn't know what the tough did.

The Governments of the Space Era selected from Alpha's

principles. They ridiculed nationalism, for instance, and killed it as dead as feudalism, but they intensified the patriotic emotion on behalf of the planet and its 'honour'.

By now I am well versed in comparative political science. To my mind Alphism has many points of interest, but it is best suited to the man whose energy is impaired, as after writing a chapter of history of making love to his wife in the middle of a very hot day. A more expressive term would be Narcoticism.

E. *The Period of Ford.* (Homœopathic extension of Sheldonism: coarsening of social structure and refining of psychopathological control: slavery more blatant, final disregard of all idealism.)

The historian of the Ford Age was Aldous Huxley (*Brave New World*). A new calendar had been adopted and the society described by Huxley belonged to the Seventh Century after Ford. There is some doubt as to whether Ford was the inventor of the automobile or of psychological conditioning. (His name is sometimes spelt Freud.) Internal evidence suggests the Twenty-Sixth Century in the old Christian calendar.

The World State was now fully established. There were ten World Controllers. Huxley was concerned with events in Western Europe, which had its own Resident Controller. The State motto was 'Community, Identity, Stability'. Its major aim was social stability. Animal methods of procreation had been abandoned and ova were fertilised in Hatchery and Conditioning Centres. A surgical operation was 'undergone voluntarily for the good of Society, not to mention the fact that it carried a bonus amounting to six months' salary'. By Bokanovsky's Process the ovum budded under the bombardment of X-rays. Anything from eight to ninety-six embryos, all identical, might result. The growing embryo was passed in a bottle along a slowly moving conveyor belt for two hundred and sixty-seven days at the rate of eight metres a day. It was fed on blood-surrogate and stimulated with placentin and thyroxin. It was given gradually increasing doses of pituitary, also of hog's stomach extract and foetal foal's liver to combat anæmia. Tests were made for sex. Thirty per cent of females were allowed to

develop normally, the others receiving a dose of male sex-hormone and being later decanted as freemartins (sterile).

Social structure was predestined. Five castes were recognised: Alphas,* Betas, Gammas, Deltas, Epsilons. Only the three latter were bokanovyskified, receiving less oxygen, with consequent effects on brain and growth. An attempt was being made to speed up maturation. If predestined for the tropics subjects were conditioned by hard X-rays to abominate cold. The secret of happiness and virtue was considered to lie in liking whatever you were compelled to do. The Delta masses were conditioned to hate flowers and books. The countryside was gratuitous and the masses merely consumed transport in going there; a higher level of consumption was considered necessary for the health of society. The optimum population was modelled on the iceberg, with eight-ninths below the water. Post-natal conditioning was done by hypnopædia or sleep-teaching, 'the greatest moralising and socialising force of all time'. The different castes were subjected to Elementary Class-Consciousness Lessons. The Betas, for instance, heard it endlessly repeated that the Alphas were frightfully clever and worked hard, the Gammas were stupid and wore green, the Deltas wore khaki, the Epsilons wore black and could not read or write. The Lesson ended with the reflection, 'I'm really awfully glad I'm a Beta because I don't work so hard!'

The chief economic slogan was, 'Ending is better than mending'. Old clothes were thrown away. Every man, woman and child was compelled to consume so much a year in the interests of industry. Simple Lifers were killed. Two thousand culture fans were once gassed in the famous British Museum Massacre. (Cultural interests tend to reduce fascination by gadgets.) In the later stages of this society such measures were considered crude and were replaced by ectogenesis, neo-Pavlovian conditioning and hypnopædia. A perfect drug, soma, was widely distributed, replacing both alcohol and popular religion. Its great merit lay in its elimination of both hangover and mythology. In general, social morality demanded an

* This is a significant term and recognises the debt owed by this society to Alaphist theory.

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absence of passion, emotion, family waste and romance. Erotic play was encouraged among children and promiscuity became the social norm. There was a horror of solitude. Society's source book was *My Life and Work* by Our Ford, which ~~was~~ unfortunately not survived to my knowledge.

Popular religion, with its wasteful and misdirected outbursts of emotion and enthusiasm, was deliberately killed, but the need for a theology remained. God was Orthodoxy. The Director of Hatcheries and Conditioning is reported to have said:

No offence is so heinous as Unorthodoxy of behaviour. Murder kills only the individual—and after all, what is an individual? Unorthodoxy threatens more than the life of a mere individual; it strikes at Society itself.

Happiness was the Sovereign Good and a Solidarity Service was held to acclaim it. Twelve people, alternate men and women, sat round a circular table, passed the soma cup and repeated the formula, 'I drink to my annihilation', 'I drink to the Greater Being', 'I drink to the imminence of His Coming', and sang the three solidarity hymns. One of these ran:

Ford, we are twelve; oh, make us one,
Like drops within the Social River;
Oh, make us now together run
As swiftly as thy shining Flivver.

Then they heard the feet of Ford coming, and got up and danced round the table, slapping the buttocks of those in front, faster and faster, with tom-toms and cymbals, growing frenzied until they reached the final consummation.

Orgy-Porgy, Ford and fun,
Kiss the girls and make them One.
Boys at one with girls at peace;
Orgy-Porgy gives release.

In these ceremonies the sign of the Cross was abbreviated to the sign of the T, derived from the first T-model.

Despite the great political and social advances of Alphism and Fordism, there were still areas and sections of mankind which did not fit into the prevailing pattern. Scattered about

the world were reservations where the local populations still lived their old ancestral lives of ritual, dirt, disease and monogamy, under the wing of the ancient deities Jesus and Pookong. 'Owing to unfavourable climatic or geological conditions', it was said, 'or the poverty of natural resources, they were not worth the expense of civilising'. Before this civilisation reached its peak of efficiency there had been various experiments which ended in failure, particularly in the Twenty-Fourth Century, after the end of the Sino-American War. The island of Cyprus, for instance, had been cleared and resettled with 22,000 Alphas. The result was disastrous, for Alphas did not possess the proletarian qualities necessary to make a higher culture possible. The land wasn't properly worked, there were constant strikes in the factories, laws and regulations were disobeyed, and there was constant intrigue for the better jobs. Within six years civil war broke out, in which 19,000 were killed. The survivors asked the World Controllers to resume government. A little later another experiment was made in Ireland, where the whole population was put on to a four-hour day. The result was widespread unrest and a large increase in the consumption of soma. After this the Inventions Office became a morgue containing thousands of plans for labour-saving devices. Although it had become possible to synthesise all food it was preferred to keep a third of the population on the land. In the first World State an attempt had been made to forsake the land for residential purposes but now the reverse process was put into effect. It took longer to produce food by agriculture than by manufacture, and excess leisure had to be avoided. Moreover, too frequent change produced instability. 'Every discovery in pure science is potentially subversive'.

There were still heretics to be dealt with--the hope of the human race, as it turned out. These were sent, as incorrigibles, to live in isolation on selected islands (Iceland, the Marquesas, Samoa, the Falklands). There were people who were too self-consciously individual to fit into the community-life. It was from these populations that mankind's last despairing initiative budded, when Alphism, Fordism and Null-A came to a full stop in Stasis and Logicalist futility.

TOMORROW REVEALED

Today we are further in spirit from the World of Ford than from any other civilisation I have yet read of. And yet its echoes persist, reminding me that my own world is not merely a station in time but is the cumulative product of all that has gone before. Only a few minutes ago I heard some of my children (I have seventeen now) chanting their version of that old Fordian hymn that has survived, in these words:

Orgy-Porgy, pudding and pie,
Kiss the girls and make them cry.
Orgy-Porgy, frolic and fun,
Beat the girls and make them run.

F. *The World of Null-A*. (The triumph of semantics: man abdicates all responsibility to the Machine: human control reduced to one molecular point.)

Our authority is A. E. Van Vogt in his book, *The World of Null-A*. Null-A means Non-Aristotelianism. The Institute of General Semantics, which assumed power from the Controllers, wished to eradicate all remnants of Aristotelian thought, which they claimed still dominated human thinking. Aristotle had made abstractions from reality; Null-A aimed at reality itself. Aristotelianism was two-valued, formulating all primitive identifications into subject-predicativism. Null-A integrated 'many-valued realities of modern science'. An *event* in the Null-A interpretation, for instance, was not merely an isolated occurrence but all related phenomena at a specific time in a specific place. Long personal training was required to attain such conscious integration. Automatic extensional thinking was the key. 'The map is not the territory. . . . The word is not the thing itself'. The cortex (centre of discrimination) and thalamus (centre of emotional reaction) were trained to the highest degree and were organised to work in perfect co-ordination. When done successfully the nervous system could withstand almost any shock.

This society centred round the Machine, an enormous structure containing 25,000 electronic brains set up in series. It was self-renewing, conscious of its own life and purpose, immune to bribery and corruption and theoretically capable of

preventing its own destruction. It selected rulers by semantic tests. It had three limitations: it had to operate the Games fairly, within a framework of laws laid down by the Institute; it must protect the development of Null-A; it could only kill human beings when attacked. The Games, by which the chief officials were selected, were held annually in Machine City. The Games required knowledge and skill integrated over a long period. During the last fifteen days they required such flexibility and understanding that only the keenest and most highly developed brains in the world could hope to compete'.

One piece of elucidation is perhaps necessary. Fordist conditioning, under even the most rigorous controls, could not produce absolutely standardised results. There was always a slight biological and psychological spread in each caste. The duty of the Machine was to sort out the Pluses and Doublepluses from the main mass of Alphas.*

G. Logicalists and Sophocrats. (The decline of mind into complete ineffectuality: the parallel religious movement.)

The various societies I have examined and reported on so briefly are referred to collectively by Roberto Graves as Logicalist and Sophocrat. Graves's mind was (or possibly is) dominated by religious considerations. Where Huxley was fascinated by the enslavement of mind and body and Van Vogt by the semantic revolution, Graves found chief significance in the petrification of religion and the utter stifling of all occult forces. His survey of the period therefore gives far more weight to the later history of the Churches, ostensibly the custodians of mankind's spiritual experience, than to any other development.

Determined to find religion even where none existed, Graves

* The struggle to impose semantic tests on society had its roots far back in the past. Robert Heinlein writes of a document called the Covenant which was the first entirely scientific attempt of its kind. It discarded all previous concepts of justice. Semantically, justice has no referent. There is no observable phenomenon in the space-time continuum to which one can point and say, 'This is justice'. But damage, physical or economic, can be pointed to and measured. Citizens were forbidden by the Covenant to damage one another. Any act not leading to damage was legal. There were no rational standards of punishment. Penology joined witchcraft as a forgotten art. Social offenders were examined and offered a choice between psychological readjustment or a withdrawal from society.

called the Space Era the Late Christian Epoch. He himself was not deceived by the title; it was the sheerest irony. The name of Christ was still invoked, His Churches continued to struggle for supremacy, but it was shadow-boxing only. The old Papacy was suppressed by the Christian Communists of America, also referred to as Pantisocrats or Levellers, and the main seat of Christ on Earth was transferred from Rome to San Francisco. By the time the Second World State was established there were two 'supreme' Churches, the Roman and the Orthodox, who maintained a running contest, ignored by the majority of the population and even at times fought underground, owing to the proscription of the rival sects. Graves grandiloquently calls this squabble the Romano-Orthodox Wars. The Romanists issued the Falkland Declaration,* 2910, distinguishing between the rival sets of dogmas, and overcame their enemies in 2950. Graves makes it quite clear that the differences between the two brands of Christianity were minute. The teachings of Christ had long been buried beneath a rigmarole of superstition, pseudo-science and totemism. The more austere worship at different times of Energy and Orthodoxy in the rest of the world had little effect on Christian complacency.

Graves's work becomes important, however, when he describes the brief Logicalist Epoch which followed Null-A (the triumph of Pantisocracy, in Graves's terms), and which we have previously encountered as the period of Stasis. Logicalism, based on science only, lasted for only two generations, and ended in a sense of utter futility. The only quality whose value was recognised by the authorities was the morbid semantic faculty. No one with religious beliefs, sporting interests, poetic or artistic leanings was allowed to hold a public post. They had been, in fact, rigorously excluded by the Machine. 'Ice-cold logic' was the most valued civic quality. Scientific research became more and more remote and lifeless and began to wane after the year 3000. Logicalist officials became subject to attacks of colabromania. They danced down the corridors of their labs, tore animals and children to pieces and suffered from

* This in itself puts the conflict in its true perspective, as the Falkland Islands were a refuge for heretics from Our Ford.

hallucinations of golden-haired women who lashed them like tops and urged them to deeds of insane violence. No cure was discoverable. It was, in fact, the death-throes of a civilisation. The disease gripped the head as in a vice and spread downwards. Not even the psychiatrists could help for they themselves were subject to the same malady in its most advanced state. All people affected had to be 'lethalised'. (Killing was not sufficient.) In six weeks all the ice-coldest logicians had been carried off.

- The Sophocratic age that followed lasted for about two centuries. An 'Anthropological' Council was set up to decide under what social conditions mankind could live in the greatest concord and health, making allowances for ineradicable artistic, literary and religious impulses, and to safeguard dwindling resources. The Council recognised the need for a new religion, which could not be fabricated but could only spring from a primitive soil. No practical remedies were discovered, however.

Before bidding farewell to the remnants of the Space Era (for inertia had now overtaken the irresponsible enterprise of earlier days, and all the space-ships were grounded and rusting), there are two movements which arose in response to the prevailing despair which we must briefly consider.

H. *The Matriarchic Experiment.* (First abortive funk-hole: attempt to exercise female's supposed intuitive powers: partial male retreat.)

Somewhere near the Sophocratic demise a remarkable attempt was made to restore civilisation's waning powers. Popular tradition held that women possessed intuitive powers denied to men. As society had become so utterly rational that all tendencies, processes and end-products were seen as clearly as contemporary phenomena, and as the resultant vision offered not the slightest ray of hope, the experiment was made of giving full political and social power to women that their buried intuitive faculties might come to the surface and suggest a remedy. It is interesting to note in this connexion that a time traveller who appeared in the Twenty-Fifth Century announced that she came from a matriarchal society of the future. It is

reasonable to assume that she belonged to the period I am describing. Her appearance was scarcely encouraging; she wore sheet metal garments and was disturbingly masculine in her manner. I suggest that the act of government and direction demands masculine characteristics. It is likely that masculine-masculine characteristics are more effective than feminine-masculine ditto.

The idea of this experiment may have been reinforced by the work of contemporary theoreticians who believed that there was already a feminine conspiracy to supersede males. This theory is described by James E. Gunn in *The Misogynist*. They believed that an alien race of women had been landed on Earth, possibly jettisoned by their own males. They set out to eliminate the native men of Earth, but halted when they discovered that men can be useful: they are inventive, artistic, creative and they can be nagged into doing what a woman wants. These women easily gained equal civic rights without surrendering their privileges, and they controlled about ninety per cent of the world's wealth. Men were no longer required for biological purposes as it had been discovered how to inseminate successfully with salt water and an electric stimulus. If the women persevered with their plan they could eventually, with the help of pre-natal sex determination, ensure a totally female population.

These theorists claimed that they were only establishing scientifically what had always been suspected intuitively.* Swift, a professional Irish pessimist, had written: 'A dead wife under the table is the best goods in a man's house'. Cato, a Roman hypocrite: 'Suffer women once to arrive at an equality with you, and they will from that moment become your superiors'. The Bible, a collection of divine aphorisms: 'How can he be clean that is born of woman?' The masses had guessed at the same truth, as was evident from a host of folk sayings. Yugoslav (Russian by-product): 'A man is happy only two times in his life, when he marries a wife and when he buries her'. Rumanian (a race of Vampires): 'When a man

* The implication is that men once possessed intuitive faculties.

takes a wife he ceases to dread Hell'. German (one of the sixty-five Master Races): 'Never believe a woman, not even a dead one'. The thesis closed with figures showing that there were more men in asylums than women, and more widows than widowers.

The movement was therefore born not only from despair but also from fear, followed by appeasement. But it was a miserable failure. Only the Western half of the world adopted it, the other half sticking doggedly to their machines. One of the first things the matriarchs did was to ban all machinery for collecting, collating or interpreting information. Certain machines, such as photolocks and robot-writers, were used for utilitarian purposes in Government offices but were banned outside. The women argued that the crisis had been caused by the male slackness resulting from the ceaseless use of machinery. It is clear from this that the matriarchs were as completely devoid of spiritual *nous* as the men. The problem lay much deeper than one of mere slackness, whether physical or mental. The matriarchs instituted a sixteen-hour working day which was as fruitless a remedy as the four-hour working day. The experiment collapsed under the assault of a group calling themselves Scientific Mechanics (Eternal Schoolboys would be an apter title). Prime Minister Martha, possibly clothed in sheet metal garments, was a quisling. (See H. J. Campbell, *Mice or Machines*.)

- I. *The Slan Remedy*. (Impulse to rejuvenation discovered by Mutants: initial resistance by Normals.)

- A race of Mutants called the Slans discovered the way out. Their history is recorded by A. E. Van Vogt in his book called *Slan*. There is no doubt in my mind that Van Vogt himself was a Slan. He was a great admirer of the race (they were feared and detested by normal human beings) and he wrote lovingly of their Intellectual brilliance, although this appeared to be akin to the Logicalist 'ice-cold logic' save that it had initiating power that was its saving grace. Van Vogt's own writing is almost entirely emotionless, staccato in quality and practically impervious to æsthetic considerations. It is difficult for an untrained mind to follow.

As we have already seen, the politics of this age had been reduced to personal intrigue pure and simple. The ruler was the most cunning. Principles were no longer important. When an attempt was made by his ministers to depose the dictator, Kier Gray, he retaliated by plotting with their chief advisers. The desire of the underlings for power was as great as that of their chiefs. It was their only emotion. We find the same thing in Simon Eisner's *The Luckiest Man in Denv*. There is a quite meaningless rocket war between Denv (Denver) and Ellay (Los Angeles). Historically the only event worth recording is that a young Atomist worked his way up the political ladder by shamelessly doublecrossing his superior officer.

The Slans first appeared on the scene after a period of Chinese ascendancy, when China had become depopulated by war. The Slan advantage lay in their powers of thought-reading—they resembled the true Telepaths. They could be recognised by a few golden tendrils in their hair. There were also tendrillless Slans who were incapable of thought-reading (though there is a suspicion that they deliberately inhibited the faculty for reasons of safety). It was widely believed among normal men that Slans converted human babies into Slans, which accounts for the constant attempts to exterminate them. It was also believed that they were created by the biologist Samuel Lann (hence the name). They possessed extremely tough musculature, owing to the speeding up of the electro-explosions that actuate the muscles. A Slan heart was in two sections, each of which could work independently of the other. The tendrils, which sent and received thoughts, were growths from a formation at the top of the brain, which Van Vogt claims was formerly the source of vague telepathic powers possessed by all humans.

The Slan leader, Jommy Cross, attempted to end the human-Slan antagonism. For this purpose he used an attuned crystal, atomically unbalanced, for 'sweetening' the human mind. Later he found he could do it by hypnotic suggestion. He assessed his problem as follows:

Even at the rate of two thousand hypnotised a year, and not allowing for new generations, he could hypnotise the four billion

people in the world in two million years. Conversely, two million Slans could do it in a year, provided they possessed the secret of his crystals.

Being a Slan he was not appalled by the magnitude of the problem.

The old inventive faculty, which had been so powerful among humans and caused so much complexity in their affairs, was still possessed by the Slans. Cross's father had invented a disintegrating weapon. Jommy invented 10 point steel. The potential theoretical strength of steel is one point. When first invented it had been 2000 point, but it had been increased by normal human ingenuity to 750 point. The tendrillless Slans had produced 500 point steel, but four millimetres of Jommy's 10 point could resist the most powerful explosion known to the Solar System.

Who were the Slans? It is true that Samuel Lann had been involved in their origin, but only as a spectator. He had examined three babies with a new mutation, and had decided that they approached perfection. He persuaded them (two girls and a boy) to mate together. Each girl bore triplets. News of identical mutations was announced in other parts of the world. Lann believed that Nature was building up for a new jump. The number of cretins was increasing and the incidence of insanity was growing. Certain tensions had been developing for hundreds of years. There was a wave of terror and mass hysteria, which reached its climax during the Logicalist period. For a time Slans were hunted like wild beasts. The Slans themselves believed that normal human beings would eventually disappear, following the Java ape man, Neanderthal and Cro-Magnon. While the Slans were increasing in numbers, sterility among normal human beings seemed to be increasing.

In this they were disappointed. It is my belief that the Slan was a deliberate production of Nature for a specific purpose. It was the Slan element which, once it was accepted, and shared or even dominated the direction of mankind, had just that degree of vision, denied to human logicians, that allowed them to initiate the New Crete experiment. That completed, their work was done, and the Slans probably died of inanition.

TOMORROW REVEALED

Let us hasten to New Crete, reader. I am in competition with the years. I am older than I imagined, my hand weaker, my eyes feebler. I pray that I shall be allowed to finish this history and to conclude with words which embody a lifetime's hard-won wisdom.

New Crete

FOR SEVERAL CENTURIES human society had been in the midst of an immense impasse but had been too blind to recognise it. During the frenzied centuries of the Space Era and the accelerating decline of the Sophocratic Age, if part of the social machinery appeared to be functioning badly the immediate response had been to tinker with the affected part. No attempt had ever been made to treat the problem organically. To the contrary, every attempt had been made to deny any organic reality to the nature of society but instead to regard it as a machine requiring oil and spare parts. Humanity was now the victim of a mechanist philosophy.

At the eleventh hour a few remaining men who retained an ounce of vision realised that society was a plant, subject to growth and constantly influenced by environmental stimuli which had been deliberately ignored during the preceding centuries. Somehow a way had to be found back to an unself-conscious yet acquiescent reintegration with Nature and all the forgotten, barely perceived mysteries that inhered in natural processes. Much more than a stern injunction, Back to Nature, was required. The Sophocratic population could not have carried it out, with the best will in the world. It would have been like setting a plate of eggs and bacon before a robot, who was secretly yearning for oil. It was necessary to manufacture a new environment (meaning, in reality, the old, original environment) and then to set people in it. It would be very much a movement in the dark, but the alternative was utter stagnation, already far gone.

The man who eventually discovered the way was an Israeli

Sophocrat named ben-Yeshu who wrote a *Critique of Utopias*. This was a detailed and learned analysis of seventy Utopias!* One can only wonder at the sustained industry and world-wide search which led to the rediscovery of these forgotten books in ruined museums and libraries. Ben-Yeshu's findings deeply impressed his worried colleagues in Southern Europe, America and Africa. It is at least pleasing to think that these mendacious and villainous productions did at last perform a useful service for mankind. The Sophocratic mind was bankrupt and in desperation it turned to the discredited fantasies of men such as Plato, Bacon, Campanella and even (it has to be admitted) William Morris! Ben-Yeshu's conclusion was brief and uncompromising: 'We must retrace our steps or perish'. He recommended that 'anthropological enclaves' be set up in Lithuania, North Wales, Anatolia, the Catalan Pyrenees, Finland and Libya—areas, one suspects, where a trace of pre-industrial gnosis might still be found to exist. In these enclaves there was to be a re-establishment of social and physical conditions as they had existed in prehistoric and early historic times. There had to be a deliberate turning away from the expert and a humble reversion to mystical faith in popular wisdom. It was originally intended to set up societies representing different stages in civilisation, ranging from the Palæolithic in Libya to the Late Iron Age in the Pyrenees. These were to be sealed off from the rest of the world for three generations, though kept under observation by field-workers responsible to the Anthropological Council. In other words, while the rest of the world continued to stew in its own juice, the enclave would begin a search for human salvation.

The first steps were not easy, however. The average Sophocratic citizen, while being fully aware that his society was cracking along numerous lines of tension, was not prepared to leave his robot-house, even if most of the gadgets no longer worked, for a plunge into the wilderness. When volunteers were asked for, few came forward. The inevitable suggestion

* This number in itself is sufficient evidence of the depravity of human development.

was made that the enclave should be populated with criminals,* but the idea was rejected. The Council declared that 'maladjustment to Sophocratic life was no guarantee of adjustability to less highly developed forms'. Realising that coercion would defeat its own purpose, the Council introduced the virus of itching paralysis into the Orkneys and Shetlands, and the wretched inhabitants welcomed the opportunity to leave their homes and to start a new life without scratching in the Bronze and Early Iron Age enclaves. The palæolithic and neolithic enclaves were never occupied, but colonists (mostly from Catalonia) were easily recruited for the Middle and Late Iron Age areas. After the three generations were up these were overcrowded and the overflow was sent to Crete. They were instructed in the use of natural products, such as tomatoes, potatoes, tobacco, red peppers, soya and rice-like grains called *dana*. These plants, at one time widely appreciated, had long since disappeared from cultivation in the face of synthetic production.

The foundation of New Crete took place in about the year 3000, and its civilisation is the one so lovingly described by Roberto Graves in his *Seven Days in New Crete*. The island rapidly became extraordinarily fertile, and later the other enclaves were closed and their inhabitants removed to Crete. The population evolved a new religion, akin to the pre-Christian religion of Europe, and linked with festivals of the agricultural year and the antique mysteries of their handicrafts. The Mother-Goddess Mari was the Queen of Heaven. Crete can be regarded as the seed-bed of a Golden Age. The population increased rapidly and apprentices were accepted from all over the world. A generation later Rhodes and Cyprus were set aside for similar occupation.

It was determined from the beginning that corruption of society by machinery must not be allowed to recur. Limitation on the use of mechanical contrivances was jealously guarded. No explosives, electric lights, domestic plumbing, power-driven

* Ever since the scientists of Alexandria had regarded criminals as fair game for vivisection this class had been regarded by their more fortunate neighbours as natural guinea-pigs.

vehicles, telephones or printing presses were allowed. Not far from Crete lay the city of Corinth, still embedded in Sophocratic gadgetry, and referred to by the Cretans as 'the terrible city', on moral and æsthetic grounds. Cretan sailors were so appalled by what they saw there they transferred their custom to Stalinopol, a small port not far from Corinth, which they visited only at the quietest hour of the night to avoid the whirr of machinery, the blare of amplified dance-music, the hideous buildings, and the 3D cartoon-comedies telecast over the harbour. The Cretans adopted as a religious principle the tenet, 'Nothing without the hand of love', meaning that no product or process was acceptable unless it had been created out of love for the tools and materials involved. In their mythology was a legend which they called the Secession of the Drones, who left the hive, repudiated the Queen Bee and lived in a privy where they contrived a mechanical Queen Bee and perpetuated un-love. The Drones were led by Machna, the God of Science, Dobeis, the God of Money, and Pill, the God of Theft. Ben-Yeshu had stressed the need of a sacred monarchy and the separation of the ecclesiastical side of religion from the magical. He declared that poets should be the acknowledged legislators of the world.

Mitigated New Cretan systems were set up in California and New Mexico, but they entirely missed the vital significance of the new conception by allowing domestic plumbing, ice-cream machines, watches, rubber goods and proprietary drugs. The New Cretans were invited to colonise part of New York State on their own terms, but they discovered they could not avoid contact with the press and sightseers; they would also have been subject to the laws of the central and local governments, and visits of sanitary and agricultural inspectors, and there would have been a public highway running through their territory. It is quite clear that the average Sophocrat was incapable of understanding the principles behind the new experiment. They were envious of Cretan prosperity and peace of mind but they did not attempt to wreck the system until their own society had relapsed into savagery. Two invasions were attempted from America and one from North Africa, but

they were foiled by magic. Five hundred years later the system had spread over wide areas of the world. Australia, Russia, Central America and Central Asia were rejected as unsuitable for permanent occupation and were written off as Lands of Mystery. Western China, Malaya, Central Africa and India and most of North America were abandoned to degenerate forms of society, and were called Bad Lands. East China, the East Indies and Japan had been so devastated in recent wars they remained uninhabited except for a New Cretan colony in the Peking district and another in South Japan. Nevertheless, they came within the boundaries of the new system, as did most of Africa.

It is clear that New Crete was a pronounced revolt against all the civilisational trends of the preceding centuries. The revolt was conscious on the part of its sponsors, and those who carried it out, except for a few heretics, retained a vivid horror of the world they had superseded. The scientific attitude had been completely overthrown and there was a return to magical attitudes. The employment of magic, in fact, was the most marked feature of this civilisation. During what had once been called the Middle Ages, and alternatively the Age of Faith, the existence of magic had been recognised. Even earlier, magic had been widely practised. It was only after the rise of scientific method that doubts were thrown on the efficacy of magic, and later it was entirely discredited. There is nothing inherently false or, in a sense, irrational about magic. Irrationality is a label we tend to give to things we do not understand. The simplest way of putting the difference between science and magic is to say that the former is based on literalism and the latter on symbolism. Magic involves the effective manipulation of correspondences. It is the spontaneous expression of a natural, earth-bound society, and it was therefore natural that there should be a revival of it in New Crete. It had nothing to do with the mumbo-jumbo that sometimes goes under the name of magic but was based on spiritual techniques and an intimate knowledge of natural processes. There was a reversion to the system whereby each person had a secret name which was his private being. The Technocrats had destroyed the private

being absolutely. You might say that sympathy had replaced suspicion as a principle of living.

New Crete was divided into two kingdoms, on the grounds that without kings there can be no true religion. Society was divided into five Estates, the members of which were chosen by capacity, with the result that children might easily belong to a different Estate from the parents. Property was an indication of the owner's Estate, never a qualification as in the old society. A person's capacity was judged by his parents, playmates and neighbours—it was usually recognised before his true education began. The five Estates were the captains (nobles, organisers), recorders (planners, directors), Commons (the most numerous), servants (the least independent-minded) and magicians (active thinkers—the others thought passively). The governing principle was custom, and each Estate had obligations to it. Priests belonged to the servants' Estate, kings to the commons. Women were regarded as the superior sex, though the categorical mistake of endowing them with special power was not repeated. There was a revival of sex, in the sense of a fruitful polarity, but the old sexual competition which had indirectly led to the dehumanisation of sex under the Technocrats was not allowed to reappear. It was recognised that the sexes had different fields of action in more than a reproductive sense. Population was sparse, travel unpopular. The New Cretans had a horror of crowds or meeting more new people than they could assimilate. Dunrena, the capital of the southern French kingdom, had a population of only three thousand at normal times, though as many as thirty thousand might come in for special occasions.

The different villages had different marriage customs. Boys and girls were free to migrate between monogamous and polygamous villages, where pre-marital experience might or might not be permitted. Every permanent resident of a village was expected to conform to local custom. The captains had little home life, being so busy with other people's affairs. Their women did not marry within the Estate. Captains had marriage agreements with villages of commons where pre-marital promiscuity was practised. The recorders regulated the birth-rate with great exactitude. The servants were over-fertile, and in conse-

quence their pulse-rate and sexual inclination were reduced by cola-chewing. This drug almost made them content to perform monotonous tasks without diversion.* Among the commons melancholy music, sombre and restrictive clothing stimulated breeding; serene music discouraged it. Servants' children became communal property. The most devoted, slow-pulsed, tractable and simple-minded became priests.

Only magicians and recorders learnt to read and write. In the previous civilisation literacy became a shibboleth. It was noticed that the more literate a population became the more unruly and repressive became society. The Chief Recorder kept count of the years in archives, but they were never published. The phases of the moon were observed, a distinction was made between morning, afternoon and evening, the days of the week were kept and the passage of the seasons marked. But time itself (like money) was abolished. As the poet Vives, who flourished towards the close of the Sophocratic Epoch, put it:

Since Time is Money,
Time must be destroyed.

One of the major problems any society has to face is that of discipline. However averse to the idea of discipline people may be, a measure of it is necessary. It was of especial importance in New Crete, which was non-authoritarian, imposed no sanctions by force and regulated its social life by custom. The success of such an attempt depends entirely on the quality of the custom and the degree to which people find it just and meaningful. In its heyday New Crete solved the problem triumphantly. One of the chief fields in which custom operates is the economic, and it is in this field that the dangers of money-making, the profit motive and shoddy goods intrude into human experience. In New Crete food and other commodities were sent to market and the buyer could take what he wanted in exchange for a gift, a poem or a prayer. (Prayer was efficacious because everyone believed in it and no one suspected its being put to a base use.) No one ever wanted more than his fair share. Greed had

* It will be noticed that this society did make some use of its predecessors' experiments. It would be an interesting study to determine the degree to which this was done, although quite a useless one.

had its day. People had learnt, through centuries of suffering, that superfluity of commodities is always accompanied by excess of egotistic emotion. People worked for love, and for no other type of reward. If anyone slacked (and New Crete was not a community of saints) he was exhorted by the captains. If this failed, the magicians would diagnose the malady and prescribe a cure. If the maldor still remained obdurate, the Goddess intervened in person. The idea that incarceration or physical punishment would benefit a person spiritually had disappeared.

Trade between the two kingdoms was carried out on the same basis, and superfluous products were exported. The system worked well because world population was stabilised at a sensible figure. No shortage of food, textiles or labour was ever recorded, and trade was completely free, without any technical obstacles, such as bills of receipt, customs or tariffs. Once trust has been established these are unnecessary.

Every effort was made to give full expression to regional variations in culture. This can be illustrated by reference to music, which played an important part in New Cretan life.* It was felt that the flute belonged to France, the mandoline to Italy, the guitar and castanets to Spain and the accordion to Germany. Not only were these appropriations based on historical origin but in some cases they were intended to counteract influences that might be inimical to the whole system. It was believed, for instance, that the climate of Germany encouraged spiritual pride and the accordion, as the most homely of all the instruments, would help to combat this failing.

New Crete based its social life on the primacy of the individual—at least, in purely human conduct. They refused to count heads or encourage any form of collectivism. The attitude was well expressed in Vives's *Satire on Numbers*. Graves quotes one of the interpreters:

Vives had come to a sensible solution, viz., that the most destructive social force of past epochs had been a mass emotion that exhibited itself in nationalism, fascism, communism, neo-

* I use the words New Cretan to describe the system as a whole, not merely the variant to be found in Crete itself.

NEW CRETE

communism, pantisocratism, logicalism and so on, and which was derived from thinking in terms of collective interests rather than of individual ones. In periods when the rich man oppressed his poor neighbours, who cried out in vain for justice, these collective interests had seemed more virtuous than the individual ones, and it had also seemed necessary to count heads to demonstrate that these poor people greatly outnumbered the rich and were therefore deserving of consideration. But once people accepted the principle, viz., that the individual, whether rich or poor, must subordinate himself to the millionfold State, regarded as the repository of collective interests, then everything went awry. Since this State was a social, not a religious concept, and based upon law not upon love, it had no natural cohesion. It was too unwieldy an aggregate of diverse and unrelated elements for any single person to comprehend it; and therefore only charlatans came forward to govern it.

Charlatans came forward,
Boldly adopting titles
Of mathematic virtue.
Square Root of Minus One
Proclaimed himself Dictator
And swelled a private grudge
By arithmetical progression
Into a mad crusade.

Thus through Viçes's influence our world has been kept as a network of small communities where everyone is known to his neighbour by nickname and face, and no count of heads is ever taken. States exist only in so far as these communities are bound to one another by common ties of custom and acknowledge the same king.

In the past the prophets of revitalisation along these lines had always been ridiculed as impractical theorists who would never be able to cope with social or economic organisation. The truth was that only a minimum of organisation was required. The bureaucrats, bedazzled by their forms and regulations, had been unable to imagine a society functioning without them. But the New Cretans tackled these problems with a much greater sense of realism than anyone before them, and certainly with more than the Sophocrats had ever given them credit for. After long discussion it was decided to retain the railway system, which although an anachronism during the Space Era

had been retained for the cheap carriage of durable freight. The Cretans applied one test to all doubtful phenomena: is it a labour of love, or the product of such labour? They agreed that while the railways had not been constructed according to this rule, the principle was a humane one. The accepted attitude was summed up by one of the female debaters:

If the principle, which is represented by the track and the flanged wheels, is judged to be humane, let that be preserved. It remains to exert love on the rest, namely the coachwork and the track, and incorporate it in our kingdom.

As a result boat-shaped trucks were made and were drawn by oxen. No passengers were allowed on the trucks. (Horses were reserved for captains, white asses for magicians.) Vives wrote:

With wheels and wings and rockets
 The outlanders have shrunk their territory
 (Which is a thousand time more wide
 Than yours, noble New Cretans)
 To a mere village green and duckpond.
 But ride no faster than a man may run,
 And soar no higher than a man may leap,
 Count distance by the day's march or the day's sail:
 Respect the fertile spaciousness of earth
 As you respect her who here reigns.

In one field the New Cretans drew on the capital left by their predecessors. They did not mine precious metals because there was a vast hoard at Fort Worth in America which had been discovered and excavated by the Sophocrats. Large stocks of copper and malleable stainless steel had also been left over from previous epochs. I think that in this case the New Cretans transgressed the rule of love, for these metals had been mined and subjected to various processes by labourers intoxicated with greed or, in some instances, despair. Love is the noblest principle of all but her rule can be harsh. It is possible that this transgression was at the root of the tragedy that finally overtook the New Cretan civilisation.

The manufacture of paper and parchment had been discontinued as it led inevitably to bureaucracy. All records of importance were engraved on thin plates of gold or silver. They

also used slates, tally-sticks and clay boards, but chiefly their memories. The exhortations of Vives's poems, carried about in every head, easily acquired the force of custom.

It was also necessary to adopt an attitude towards scholarship. The Sophocrats, when they realised the harm done by the elimination of cultural pursuits, had indulged in literary excavation. They rediscovered the poet Shakespeare and boasted about him as if he had been their chief glory. In fact, Sophocratism would have reduced a living Shakespeare to a silent corpse. The New Cretans discovered that 274,000 books had been written about this poet. They decided to commemorate him with three books: a complete text of the Plays and Poems, a Life and a Digest of Shakespearian criticism. But later the Life and Digest were reduced to three pages, the Plays and Poems to thirty. They also made an *English Canon*, beginning with Thomas the Rimer (who wrote carols in the Goddess's honour), Robin Hood the archer (who wrote ballads) and Henry Tudor (a witty court poet). The New Cretans did what the Post-Exilic Jews had done when they ascribed all ancient religious poetry to King David and all ancient amatory verse to King Solomon. According to this scheme, Henry Tudor wrote the best work of Wyatt, Skelton and Dunbar. Shakespeare incorporated the life and letters of Sir Francis Drake, the Earl of Essex, Sir Walter Raleigh and Christopher Marlowe.

Their Golden Archives contained one hundred volumes. They included the *Myths of Crete*; *Myths of the Ancient World*; a *Brief History of the World* (9 vols.); the *Canon of Poetry* (15 vols.); the *Book of Sums and Numbers*; 28 Registers (plants, birds, fishes, etc.); 13 Manuals (surgery, dyeing, metallurgy, etc.); 12 Dictionaries; 3 Books of Maps; the *Book of Precedents* (5 vols.); the *Book of Secrets* (5 vols.); and the *Book of Death*.^{*} They retained no information about philosophy, advanced mathematics, physics or chemistry, or the motivation of any machine more complicated than the water-wheel, pulley or carpenter's lathe.

Information was collected by barbers, who reported village

^{*} If I had been able to trace these this present work would have been superfluous. I discovered their existence too late and am too old to initiate excavations in Crete.

gossip to the Chief Recorder. Each barber took back a summary of collated reports called a *pravda** for public recitation. Once a month district *pravdas* combined into a regional one. An anecdotal history of the whole kingdom was compiled at irregular intervals. The histories of the various kingdoms were periodically reviewed and collated, combined with the magical and meteorological records, and incorporated in the Brief History, the Registers or the Manuals.

The New Cretan social order was based on the land, and agriculture and food production were of more than economic or biological importance, the position to which they had declined as long ago as the Seventeenth Century. The Technocrats had come nearer to destroying the human race by their sewage system than any of them realised, Graves claimed. Half the population had lived in big towns from where vast quantities of food, in the form of excrement, had flowed to the sea and been lost. The fields had been denatured by artificial fertilisers. Huxley had already traced the connexion between large populations, food shortage and war, and the circle in which they moved. Even in the Sophocratic period it had been realised that three mechanical contrivances, which had once been considered among the most valuable fruits of civilisation, were in fact dangerous enemies of mankind. These were the water-closet and incinerator (which robbed the land of richness) and the tractor (which allowed farmers to plough up and turn into desert inferior land that should have been left to grass). The New Cretans returned to the methods of the Moors of Granada, the most enlightened husbandmen of the Middle Ages, whose work the Spanish Christians had wrecked.

Now one very odd decision of the New Cretans was that war was necessary to man's complete spiritual fulfilment. But by war they meant personal conflict, not slaughter or scientific annihilation. Their conception of war was rather like a mediæval football match, where heads might be broken but man's combative spirit would be given release. It was fought

* The origin of this word is obscure. It is probably related to another mysterious word, *organ* (as in 'organ of public opinion'). As an organ was a musical instrument I imagine it served as an early form of automatic reproduction.

between villages and only between people who knew each other, for war at its best is an act of love, just as all games had originally been. A village meeting decided on the declaration but without voting (no counting of heads). When the discussion had ended, the decision was 'felt'. The issue was always trivial for it is when wars are fought to determine matters of vital significance that they get out of hand. The 'warriors' wore special clothes, carried banners, marched with a bugle band to the frontier, parleyed with the enemy and finally declared war. The rival captains then discussed the limits of the fighting, the duration of truces, the positions of the district recorders and how many magicians would be needed. The combat took place on the following day. The fighting man was well greased and naked except for leather breeches, gauntlets, moccasins and round leather helmets. They were armed with light quarter-staffs padded at one end. They were stained different colours for easy identification. Priests performed an opening ceremony. The object was for the invader to thrust a war-token down the mouth of a godling beneath the enemy totem pole, while the defenders were to capture it and do the same. The day's fighting was followed by a feast and judgment by the magicians.

Such warfare was not a new thing in human history. In archaic days the Goddess used to allow people to go to war but she always kept it within decent bounds. But rebels against her established a Father-god, whose sole business was war. A typical by-product of God-worship in the late Christian epoch had been unlimited scientific war, which nobody liked but everybody accepted as inevitable. We have witnessed the results of this. It was in fact the Goddess who had arranged it, with two objects in mind: she would emancipate man because she loved him, and allow him to fulfil his destiny by letting him find out the absurdity of creating a supreme deity in his own phallic likeness, and she would demonstrate in him the existence of certain intellectual qualities hitherto unsuspected by women. We have in this the New Cretan philosophy of history. They regarded the Holy Trinity of the Christians as a symbol of mass-deception, its supposedly lofty spiritual nature masking a Rogue Trinity of Gods of Reason, Robbers and Money. In

their view Christianity was a monstrous diversion, which came to comprise all sorts of contradictory beliefs.

Ben-Yeshu had started his famous book with these words:

Civilisation has suffered a global *crise de nerfs* resultant on an attempt to eradicate a vital religious element from the psychological inheritance of the dominant Alpine blood-group.

His conclusion had been that the Goddess must be reinstated. But even the New Cretan society could not escape those subtle tensions that insidiously rack and strain man in his corporate life. The danger was that too much stress had been laid on virtue—quite naturally when one considers the overwhelmingly successful career of vice. All natural intuitions of ill-doing were repressed so that life tended to be still and semi-paralysed. There was even something fraudulent and insincere about the witches, a suggestion that they lived an other-life unknown to their neighbours. Gradually the memory of the old evil had faded and as a result the notion of good was reduced from supreme good to mere normality.

The dark impulses of men had not been eliminated. They had been canalised into expressions of mythological significance or they had been repressed by the weight of custom or, in the most dangerous cases, shut away in Nonsense Houses. The demand for blood, instead of being forced into a merely sadistic outlet, found expression in a half-yearly rite, the crowning of the king, when a victim was murdered and eaten by Wild Women. This midsummer sacrifice had to be voluntary, which presumably gave a sanction to an act which might alarm the slower-pulsed. The people took bread and wine to the ceremony in imitation of the feast but if there had been no celebration in fact there would have been no virtue in imitation. The life blood was sprinkled on the fields. Once again the cry arose, 'It is expedient that a man should die for the people'. The flesh was eaten as a mark of reverence. If for some reason or other the sacrifice were annulled murder would be committed on the slightest excuse.

The New Cretans were not appalled on humanitarian grounds by ritual murder or cannibalism. But the danger

inherent in these acts lies in the ease with which religious significance can evaporate into mere formalism. So long as the death of the victim, the eating of his flesh and the sprinkling of his blood were integral portions of a living ceremony, all was well. Perhaps they gradually, unknown to the guardians of their society, had lost their meaning. Perhaps the act of love was hardening into habit. Perhaps the inmates of the Nonsense Houses were pressing outward irresistibly. Perhaps the witches were losing their sense of responsibility. Whatever it was, suddenly and catastrophically, the Whirlwind was unleashed and New Cretè was no more. To this event I turn in my next and last chapter.

The Whirlwind

I HAVE MENTIONED the Nonsense Houses. They contained the pent-up vice of the human race. The New Cretan principle of dealing with vice was completely novel. Instead of punishing the perpetrators they gave them full licence, but they were not allowed to pollute the outer world. It was a form of imprisonment, perhaps, but much more kindly than the state we usually understand by the word. Any effort to reform the evildoers was renounced, unless it was hoped the unchecked freedom would produce nausea, followed by self-reformation. Only elders were admitted—the young were forborne until advancing years made any change of conduct seem impossible. Or perhaps the young were never tainted. Inside the houses the women swapped dirty stories and had young men brought in for sexual purposes. The male inmates had erotic pictures on the wall, wrote and read contraband books (not necessarily pornographic), studied scientific theories, played with mechanical toys and indulged in other corrupting practices.

The destruction of New Crete is as mysterious as the destruction of some earlier civilisations which appeared to be healthy one moment and dead the next. (Ancient Crete was another.) The Sophocrats had sunk into barbarism and had become incapable of any sustained or co-ordinated effort. I have mentioned some possible causes of the New Cretan collapse. It might be true to say, as a generalisation, that they died of advanced hedonism. They had removed evil so far from their lives that at last they could no longer recognise it and when it returned they were easy victims. Evil, of course, had never been completely banished and when the time came the lusts

THE WHIRLWIND

and logical diseases to which men are subject were at hand in the Nonsense Houses, in excellent trim and eager for an outlet. It must be remembered that the New Cretan civilisation was based on magic and that it was probably destroyed by magic, its own magic gone sour. As I am unacquainted with the inner life of magical practice, its effects are bound to mystify me. There is no time lag in magic, effect follows cause in rapid succession. All I can say is that in reading Graves's history I get a strong impression of something malignant in the air, a feeling that runners have slipped their grooves, that the periphery has lost touch with the centre. Whether they were actually ruled by the Goddess or by their own creation of a Goddess, latent energy organised itself and revolted against centuries of complacency. The scientific epochs forgot the power of natural instincts, or repressed them; the New Cretans forgot that scientific curiosity is itself a human instinct.

By my reckoning, the Whirlwind swept this culture away fifty-one years ago. Since then there appears to have been a quiet pastoral existence, based on custom and ceremonial it is true, but without the invocation of friendly powers. There are indeed the Powers, but they are distant and feared. We appease them. This is an old pattern coming to life again but there is this difference; we are not a young race. We are heirs of failure and terror and disillusionment and rare moments of vision. Above all, we are not inquisitive or creative. Perhaps these qualities will return but at the moment we are as satisfied as vegetables.

By 'we' I mean these riverine tribes. What goes on elsewhere I don't know. Occasionally we meet a jitter, who dresses differently and behaves eccentrically. They are usually merchants, selling textiles, jewellery, metal goods like tin-openers (which we never buy) and also, very occasionally, manufactured articles of some ingenuity. One showed me a little machine which could make pictures. All of this argues a higher state of organisation and industry in other parts of the world, but I have no exact information. Some things I am certain are not the same as when this history opens: there are no black and white people, we are all brown. I am not so sure about language.

Here we speak a lingo derived from English, but it is greatly adulterated. When I discovered my library the first thing I had to do was learn the ancient language. I have had to write in that language because our present tongue is far too limited in its vocabulary to express the ideas found herein. When my scribes copy out this work and distribute it to all who can and will read, it will be accompanied by a glossary.

On the whole this has been an encouraging record. Granted, it is largely a story of madness, but it ends with a burst of sanity and sweetness. Now that has gone too, but it has left a society that approaches more closely to a vacuum than any I have yet read of. I think we are suffering from racial exhaustion. Later we will recover our strength and another period of initiation will start. I feel confident that the racial mind, whether it exists as an amalgam or is merely the resultant of individual cells, carries within it the lessons of the past. This book is intended to reinforce the wisdom men must have learnt. There are still some among us who are fascinated by boxes which make pictures without love. But there is a much stronger element in our people, beginning to demand expression. Only five years ago no one appeared capable of any creative act beyond that of keeping themselves and their animals alive. But now it is not uncommon to find crude drawings scratched on wood or marked in sand. I have seen children making animals from clay. And by what seemed to me more than coincidence, this morning, when I sat down to write this, my last chapter, my fifteenth child, whom I have named Leo, triumphantly showed me this fancy which he had scrawled on the back of some notes about Alphist theory.



THE WHIRLWIND

So the future is bright.

What is the value of history? I sometimes wonder. I have written this as a warning. But what is the nature of the warning? I have only enough strength remaining to write a few words. History is nothing unless it is an adjunct to theology. If it can teach us nothing of the cosmic purpose it is merely an entertainment. What hints do we get from the history of modern times? Very few. The spacemen, whose Inner Station and Met Stations still circulate unceasingly in their orbits, were not aware of theological problems. But here and there we come across revealing incidents. History is a method of eliminating false hypotheses. It will teach us nothing positive. It will only teach us what to avoid.

This has been a history of events, but more significantly of men's desires. The state of society in general, at any given time, is what the generality of men have desired and worked for. One would think that during most historical epochs they have worked for their own suicide, which accounts for the Lemming Theory. Men have found something attractive about the idea of self-immolation. Death is easy, not necessarily unpleasant, and can be preceded by moments of intense exaltation. It solves no problems but dismisses them. Man has insisted on doing what he wants. He has created, usually in his own image, one God or many Powers or a Life Force or a Pregnant Nothing, but these have been his servants. He tries to deceive himself by bowing to his own creatures but a creature is never an autonomous master. Even when man enslaved himself to the Machine, he did it of his own volition. He could have emancipated himself at any time he wished. But he was horrified by his own stupidity and wished to shift responsibility on to something non-human. It is my belief that man can never find salvation (which is freedom) until God has sufficient courage to assert Himself.

During the writing my own views have changed. At first, in common with my fellowmen, I believed in the Powers. Now I know that they are merely human projections. It is excusable in our case, we need a generation or so to gather our wits, and during that period we wish to take orders. We must always

take orders, but we must be more careful whom we take them from. I am now convinced of a purpose. At one time, when galaxy struggled with galaxy, it seemed impossible to believe in anything except man's stupidity. But we must and do believe in something else. The something we have yet to discover. We can call it God. The name may be discredited, but we will win nothing by refusal to face the unpleasant. Nothing that is not of theological significance is important. But everything must, by the nature of things, be of theological significance. God cannot be something we hesitate to put our faith in. It cannot be the Life Force or Racial Dominance or even Sinless Man, because then he would not be Man at all, but something other. God is the point at which we all willingly meet and live at the full stretch of our capacities. God is Love.

We are only one race, and if nothing else came out of the Space Era we did at least learn of creatures that had solved these problems and were living in a state of beatitude. When Garrard went on his exploratory trip to Alpha Centauri he found himself mysteriously in communication with creatures calling themselves 'the clinesterton beademungen'. His understanding was incomplete but strangely love-inspired. 'We are the clinesterton beademung', they called to him, 'with all of love'. They referred to Alpha Centauri as 'the twin radiocoles', which they had arranged ('pitched') that the being-Garrard should 'woo with most admiration'. The All-Devouring listens to lovers, they proclaimed. Garrard confessed that he felt 'much minded and of love'. And when he, this hard-bitten spaceman, radioed home his report he ended his message, 'with all of love'.

And here is Katharine with my freshly cooked Nile perch and cup of merissa. Greetings from both of us, 'with all of love'.

